# SPIRIT FALL 2025

A MAGAZINE FOR THE GEORGE MASON UNIVERSITY COMMUNITY

## Making Human-Machine Collaborations Work

George Mason is preparing future leaders to harness technologies and their potential, leading to solutions for a better world

ARTIFICIAL INTELLIGENCE | HUMAN-MACHINE INTERACTION | LIFE SCIENCES AND ENGINEERING BUILDING



WHAT A SEASON!

In a hard-fought competition, the George Mason University men's track and field team captured the Atlantic 10 Outdoor Championship title, their first championship win since 2019. Capping off the successful weekend, Head Coach Andrew Gerard and his staff were honored as the Atlantic 10 Coaching Staff of the Year.

## MASON SPIRIT FALL 2025

#### **ABOUT THE COVER**

George Mason psychology doctoral candidate **Andres Rosero**, MA Psychology '22, is exploring robots and deception in his doctoral research. Rosero is pictured on the cover with Baxter, an industrial robot from Rethink Robotics.

Photo by Ron Aira

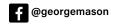


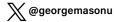
#### **BOT TO THE FUTURE**

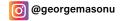
They might not look like a soccer players, but these Robo-Patriots traveled to Brazil in 2014 to play in the international RoboCup. Learn more about George Mason's robot history on pages 27 and 48.

#### CONNECT WITH GEORGE MASON UNIVERSITY

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Scan the QR codes you'll find throughout the magazine with your smartphone's camera app for associated websites with more details.

## features







Powered by AI

As AI reshapes industries, George Mason is preparing future leaders for the challenges they will encounter and working to harness these technologies and their potential to help build a better world.

**Robots on a Mission** 

From search and rescue to robotic deception, human-machine interactions are about more than circuits and sensors. They're about empathy and ethics, too.

**Powering Progress** 

With labs for every field from kinesiology to forensic science, the Life Sciences and Engineering Building is fostering collaboration, research, and economic development across the region.

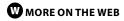
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#### **HIGHER AND HIGHER**

When we say that George Mason University is "All Together Different," these three words proclaim that George Mason excels in ways that most universities in our state and across the country do not.

The Carnegie Foundation and American Council on Education are taking notice. They selected George Mason for their loftiest tier-Higher Access, Higher Earnings—on their list of Opportunity Colleges and Universities. This distinction credits George Mason's commitment to providing pathways to college, supporting students on their way to earning degrees, and assisting our graduates in landing jobs that lift their economic stature.

George Mason has received high praise in recent years from U.S. News & World

Report, The Wall Street Journal, and other outlets, but this latest recognition truly captures the essence of what George Mason University is all about.

There are only 13 large or very large R1 universities in the country (out of 96) that earned their way onto the Higher Access, Higher Earnings list. And there are only five "very large" universities—George Mason's category—that achieved this status. The other four are in Arizona, Florida, and Texas.

So between Disney World and Canada, we're it. Between the Atlantic Ocean and Houston, we're it. This accomplishment should be a tremendous source of pride for our students, faculty, staff, alumni, community, and state.

The "higher outcomes" component is critical because that means we are successfully preparing our students to launch fulfilling careers and become more upwardly mobile. One way we achieve these outcomes is by offering degree programs that serve employers in our region and state and preparing our students with the skills they need to succeed in a rapidly evolving economy.

Artificial intelligence, as you'll read about in this issue of Mason Spirit, is one of these crucial areas in which George Mason empowers students. Al is transforming industries in all fields and employers in our region expect George Mason graduates to responsibly and efficiently use AI in the workplace. This is why our faculty continue to develop courses and degree programs that incorporate Al. George Mason is the state's first public university to offer a stand-alone master's degree in artificial intelligence, which debuts this fall. We are also offering a course open to all students called AI4AII: Understanding and Building Artificial Intelligence. In addition, students across all majors can earn a minor in AI and ethics.

We still have much to learn about AI and its capabilities. But we don't need AI to tell us this: George Mason University is an exemplar of what a great public university can and should be.

**Gregory Washington** President, George Mason University

#### **MASON SPIRIT**

A MAGAZINE FOR THE GEORGE MASON **UNIVERSITY COMMUNITY** 

#### spirit.gmu.edu

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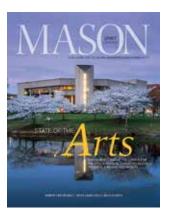
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**TAKE ME OUT TO THE BALL GAME**—In June, George Mason alumni in the Tidewater area of Virginia enjoyed a Norfolk Tides Minor League baseball game versus Gwinnett Stripers at Harbor Park Stadium. To see more opportunities to connect with fellow alumni, visit alumni.gmu.edu.



## We want to hear from you.



Letters to the editor are welcomed.

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#### Keep updated on what's going on

## MASON



The project's camera traps have collected tens of thousands of animal images, such as a tufted capuchin monkey (above), a crested eagle (next page, top), a woolly mouse opossum (next page, middle), and an ocelot (next page, bottom).

## USING AI TO TRACK AMAZON RAINFOREST SPECIES

#### THANKS TO THE TENACITY OF A GEORGE MASON BIOLOGY PROFESSOR, animals in the Amazon have a much larger audience these days.

That's good news for scientists who have their eyes and ears-trained on the Brazilian rainforests.

David Luther recognizes the importance of playing the long game in research, but even he couldn't have imagined the hurdles and roadblocks ahead of him. His plan was to install recording equipment at 50 sites as part of the Biological Dynamics of Forest Fragments Project (BDFFP) in the Amazon rainforest of Brazil. These audio and video devices were meant to document and measure differences in animal community composition and the rate of animal recovery in secondary forests and forest fragments.

All of this was part of his approved 2019 4-VA Collaborative Research Grant proposal, "Species Richness Resilience to Habitat Fragmentation and Restoration in Tropical Rainforests."

The proposed budget was devoted entirely to purchasing the wide array of materials necessary for the effort-cameras, acoustic recorders, and

batteries—along with the international travel needed to bring the project to fruition.

In March 2020, the COVID-19 pandemic halted all of Luther's efforts. Then, one of the key members of the planning team, Tom Lovejoy, passed away in December 2021. Lovejoy, a Distinguished University Professor at George Mason, was recognized as one the world's leading conservation biologists and was often referred to as the "godfather of biodiversity." With Lovejoy's passing, Luther lost a mentor and a critical member of the team.

However, Luther persisted, revamping his team and rewriting the schedule. Finally, in June 2022, he received the green light to move ahead. Between June and October 2022, 136 cameras and 81 acoustic devices were installed across 50 BDFFP sites.

Luther's efforts paid off, and the results thus far have proved more successful than he could have ever anticipated. Tens of thousands of animal images from camera traps and audio recordings have already been collected.



To analyze the data, Luther built a team of 15 George Mason undergraduate researchers, artificial intelligence (AI) experts, and members of Arbimon, which is a nonprofit organization that specializes in analyzing acoustic recordings from the tropics to identify animals.

Aline Medeiros, a PhD student in environmental science and policy, helped manage the undergraduate researchers working on the audio files. Medeiros also plans on using the collected data as the basis of her dissertation research.

Another set of students helped identify animals in the camera images and entered that information into a large database.

Luther explains that, for the acoustic recordings, they built templates for 250 bird species and trained Al models to automatically detect and classify songs for each.

"The model performed very well in our evaluations. We have already detected 201 of the 250 species," says Luther, who teaches in the Biology Department. "Thanks to our model, new recordings can be passed through it to automatically detect species calls, facilitating long-term monitoring and efficient analyses moving forward. We are now working with local experts in Manaus, Brazil, to apply the same platform to frogs at our study sites in the Amazon rainforest."

The biodiversity data is being used to assess how each species responds to variations in forest structure and recovery from forest fragmentation. Typical of George Mason's culture of working across disciplines, Luther brought on Konrad Wessels from the Geography and Geoinformation Science Department. Wessels assists with satellite information from the Global Ecosystem Dynamics Investigation instrument, which uses high-resolution lasers to provide detail in a three-dimensional forest structure. These results will build predictive models to study how the







forest structure can forecast mammal and bird diversity and individual species occurrence in tropical rainforest habitats.

In an important finding, the team has determined that the three-dimensional complexity of the forest structure, as measured by foliage height diversity, is the biggest predictor of mammal and bird diversity at this research site, and potentially others in the Amazon rainforest.

The project continues to gain traction. The team has created a well-received website featuring the results of the acoustic portion of the research. Some of the acoustic training models have been used by teams competing for the XPRIZE, a competition designed to encourage technological developments supporting "radical breakthroughs for the benefit of humanity."

Building on the 4-VA funded study, Luther also received a \$200,000 National Science Foundation grant to continue both the camera and acoustic research. Luther and Wessels recently submitted a grant to NASA to expand on the research findings and apply them to the entirety of the Amazon basin.

-Elizabeth Gillooly

#### TAKE A LOOK AT SOME OF THEIR FINDINGS.

qo.qmu.edu/ amazonacoustics



#### LISTEN TO **DAVID LUTHER TALK ABOUT** THE PROJECT.

go.gmu.edu/ rainforest





### A "KNACK" FOR TUTORING

#### **COLLEGE COURSES ARE DESIGNED to chal-**

lenge students and push them to new academic heights. And when dealing with difficult subjects and new materials, additional academic support can make all the difference.

That's where Knack comes in. Starting in fall 2024, George Mason entered a three-year partnership with the peer-to-peer tutoring platform. Through Knack, students in any of the 28 participating courses can receive up to three hours of free virtual or in-person tutoring from their peers every week during the semester. Participating courses span math, statistics, biology, chemistry, business, economics, and public health.

"We are transforming the support for student success at George Mason by fostering a collaborative learning environment that empowers students to excel academically," says Vicki Dominick, associate director of George Mason's Learning Services, which offers a variety of academic support for students, including academic success workshops, online resources, and coaching.

Knack does not replace other tutoring services offered by George Mason. It is an additional resource,

which allows more options for meeting times and places. Currently, close to 3,000 students are registered with Knack, and almost 1,500 tutoring sessions were completed in the fall semester.

"For my chemistry class, there are always many students attending office hours, so I don't get the one-on-one help I need," says biology major Khushneet Kaur Kainth. "I've been able to get personalized support through Knack."

There are benefits for the tutors as well. Tutoring through Knack is a paid position, and tutors are required to have passed the class for which they tutor with an A- or higher.

Biology major Anahita Salehkhou is a tutor for BIOL 213 Cell Structure and Function and says of her tutoring experience, "It has given me the perfect opportunity to share my passion for teaching while strengthening my resume as I prepare to apply for dental school. It's also helping me prepare for the dental admissions test, as I get a good refresher on content I've already learned and studied."

-Sarah Holland



### MASON VISION DAY RECEIVES RECORD SUPPORT

**EACH YEAR, THE MASON NATION unites for** 24 hours to support the mission and vision of George Mason University. Mason Vision Day 2025 encouraged donors to support what means the most to them. They responded in record numberswith record-breaking results.

More than 1,900 donors participated in this year's Mason Vision Day, breaking last year's record and raising \$1.38 million.

"It's a wonderful showing from our community of alumni, faculty, staff, families, and friends, and I could not be more proud of that support," says Trishana E. Bowden, president of the George Mason University Foundation and George Mason's vice president for advancement and alumni relations.

Donors made more than 2,300 gifts during the 24-hour period from noon on April 3 to noon on April 4, supporting 207 distinct funds across the university. These included campuswide programs like the Military, Veterans, and Families Initiative, the Center for Community Mental Health, and the Patriot Pantry, which are all programs that strongly impact the experience of hundreds of George Mason students as well as members of the local community.

Several of George Mason's individual units saw exceptional support throughout the day, spurred

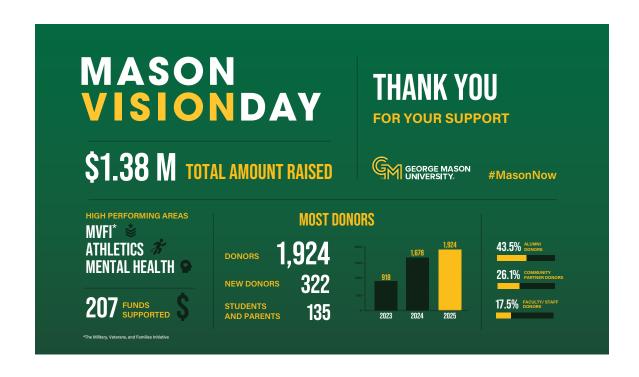
by challenge gifts and matching opportunities that allowed individual gifts to create more meaningful impact. The College of Humanities and Social Sciences, the College of Public Health, and the Honors College were among the units that benefited from the enthusiastic generosity of donors.

Zofia Burr, dean of the Honors College, was very pleased, "The Honors College walks in step with the important mission of George Mason University: to offer exceptional access to an exceptional education," she says. "Our students are leadersin academics and everywhere on campus. We are proud of our program that brings such highly motivated students to the university community, and it means a great deal to know that our alumni recognize the value of the Honors College education and experience."

The Mason Nation's alumni members, now 245,000 strong, were responsible for the bulk of the gifts made on Mason Vision Day. "The generosity of our alumni community is particularly inspirational," says Bowden, "They give to George Mason in so many ways, through their time, talents, and in this case, their treasure. They are a living tribute to what this university experience means, and what it means to be a Patriot."



These gifts are part of Mason Now: Power the Possible, George Mason's historic \$1 billion campaign to advance student success, research, innovation, stewardship, and community engagement.





## STUDENT-RUN NETWORK HELPS FEED THE COMMUNITY

#### WATCH THE **NETWORK** IN ACTION.

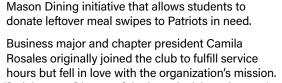
go.gmu.edu/ foodrecovery



#### THE FOOD RECOVERY NETWORK (FRN) is

one of the largest student-led movements against food waste and hunger in the country, focusing on redistributing surplus food from college campuses to the local community. The student volunteers of George Mason University's chapter work with Mason Dining's Food Recovery Verified staff to sort, package, and deliver food to the local community and campus partners.

Since the chapter began in 2018, they have recovered more than 1,600 pounds of excess food, including more than 750 pounds in the 2024-25 academic year alone. The diverted food is donated to nonprofit organizations in Northern Virginia, such as New Hope Housing's Mondloch House in Alexandria and the Katherine K. Hanley Family Shelter in Fairfax.



campus through Swipe4Change, an end-of-semester

The club also helps combat food insecurity on

"[Joining FRN] is one of the best decisions I've made since entering Mason," she says. "Not only are we donating to these nonprofits, but our dining staff has taken so much time to create this food that being able to make sure food continues on is rewarding."

As president, she oversees all volunteers and coordinates between FRN's national leadership, the nonprofit organizations receiving donations, and Mason Dining staff. "It's a lot of emails and managing finances," says Rosales, who is also a Costello College of Business Impact Fellow. "Everything needs to be done almost perfectly, from coordinating drop-off times to sanitation."

Her main goal for the spring semester was to increase recruitment efforts to be able to make an even greater impact on campus and in the local community. She also wants to expand the chapter to include more opportunities for students.

The experience has given Rosales a closer look at sustainability efforts on campus and the local impact. "Beyond the service hours, you get to see behind the scenes of where your food comes from, and you're supporting the local community."

For their efforts, FRN was recognized with a Jack Wood Award for Town-Gown Relations at the May Board of Visitors meeting.

-Katarina Benson, BA '24





The U.S. Department of State has named George Mason University a "Top Producing Institution" of Fulbright U.S. Scholars in 2024-25. The university had more Fulbrights this academic year-eight-than in any year in its history. Of George Mason's 103 total Fulbrights, 27 have been selected in the past seven years. The previous high for Fulbrights in a year was five in 1994-95. George Mason's first Fulbright was history professor Ernest Cassara in 1975-76, who taught at the University of Munich.





## WINNERS IN ATHLETICS AND **ACADEMICS**

#### A RECORD-BREAKING 78 STUDENT-ATHLETES

were named Peter N. Stearns Provost Scholar Athletes in a ceremony in February for their outstanding academic achievements.

In its 17th year, this honor recognizes the studentathletes who have earned at least 38 credit hours at George Mason and have achieved a cumulative grade point average of 3.75 or better. George Mason's Assistant Vice President and Director of Intercollegiate Athletics Marvin Lewis congratulated this year's recipients at the ceremony.

"This group truly stands out, embodying the highest academic and athletic achievement standards," says Lewis. "As Provost Scholars, they are developing valuable skills and discipline that will serve them for years to come, setting them apart as leaders among their peers."

The previous record for Provost Scholar Athletes was 68. In the 2023-24 season, 19 teams were represented, along with cheer and dance. In 2021-22, George Mason had 11 teams with a cumulative GPA of 3.30 or higher, including three teams with a GPA of 3.50 or higher.

This year, 43 student-athletes were honored for the first time, 22 have received the award before, and 11 have been recognized three times. Two recipients. Max Karen (men's track and field) and Josh Walker (men's track and field and cross country), have been recognized all four years.

#### **GETTING TO KNOW COLLEGE OF SCIENCE DEAN CODY W. EDWARDS**

Before his appointment as the dean of the College of Science, Cody W. Edwards served as interim dean for the college since July 2024. During his time at George Mason, Edwards has held numerous leadership positions, including executive director of the Smithsonian-Mason School of Conservation and as College of Science senior associate dean of academic and faculty affairs. Edwards also serves as associate provost for George Mason's Institute for Sustainable Earth and is a faculty member in the Department of Biology.



#### Tell us about yourself and what brought you to George Mason?

I'm a first-generation college student who grew up in a rural part of West Texas. My path to science wasn't linear, but it was fueled by curiosity and encouragement from key mentors. Eventually, I earned my PhD, became a professor, and joined George Mason in 2004 as a faculty member in the Department of Environmental Science and Policy. I've worked in various administrative roles across the university, including leading the unique learning opportunities at the Smithsonian-Mason School of Conservation for the past eight years. I've been fortunate to work with some of the best minds in science here, and now, as dean, I'm focused on creating opportunities for students including those with similar nontraditional paths.

#### What are your top priorities for the College of Science over the next few years?

Science is more vital now than ever. One priority is aligning our programs with emerging fields like artificial and geo[spatial] intelligence, machine learning, and guantum and data sciences while continuing to offer wellestablished pathways in pre-medical and foundational sciences. Another priority is enhancing student outcomes with innovative approaches to learning and research—ensuring our graduates are not just academically prepared but also ready to solve real-world challenges.

#### How does the college stand out in terms of research and innovation?

We have nationally and internationally recognized research in areas like space exploration, biohealth and biotechnology, mathematics, and climate resilience. Our students and faculty are involved in everything from satellite missions to Mars, to drug development, to climate modeling with community impact. We're also leading in digital twin technology and forensic scienceour programs offer unmatched hands-on learning.

#### What role does mentorship play in your vision?

It's everything. My scientific trajectory was shaped by mentors who believed in me, and I want our students to have that same experience. Our faculty members are deeply committed to student success-both in the lab and in the classrooms, through experiential learning and meaningful undergraduate and graduate research opportunities.

-Tracy Mason



From left, Nanofabrication Facility manager Shawn Wagoner with Nano Boot Camp participants William West and Hongmei Jian Roy.

## NANO BOOT CAMP HELPS BUILD TECH WORKFORCE

#### **GEORGE MASON UNIVERSITY IS PROVING**

that diving into the nanoscale world doesn't have to be intimidating. From inspiring curiosity to supporting people exploring new career paths, the university is making nanoscience more accessible than ever through programs like George Mason's Nano Boot Camp.

Launched in January 2025, Nano Boot Camp is for those who want to learn about nanofabrication, which is the process of manufacturing nanometer-size objects at the atomic level—something done in high-demand careers in sectors like health care and microelectronics. The boot camp does not rely solely on classroom lectures; participants jump right into the clean room in the Nanofabrication Facility on the Science and Technology Campus to test their new skills.

GO Virginia, a state-funded initiative administered by the Virginia Department of Housing and Community Development, provided funding through the Nano-IMAGINE program that made the boot camp possible. GO Virginia Region 7 Vice President Susan Baker visited the camp and met with participants to learn more about the hands-on training taking place.

"It was incredible to meet participants from so many different walks of life—veterans, career changers, and young professionals—all learning advanced nanotechnology skills," says Baker. "This program shows how investing in education and workforce development doesn't just change individual lives—it elevates the entire community."

The university's commitment to nanotechnology education is arriving at just the right time. Micron Technology, one of the world's leading semiconductor manufacturers, announced plans to invest up to \$2.17 billion to bolster its operations in Manassas, Virginia, bringing up to 2,700 jobs to the region.

"George Mason is developing the skilled professionals the semiconductor industry needs," says Delbert Parks, vice president and site executive of Micron Technology Virginia. "Programs like their Nano Boot Camp foster innovation and inspire students to pursue careers in STEM, forming a direct pipeline of talent that helps keep our industry strong."

Camp participant Bryson Higginbotham says he was happy to have discovered a program that recognizes that not everyone has the same learning style.

"Nano Boot Camp was really refreshing as someone who is a hands-on learner," says Higginbotham, a security officer at George Mason's Biomedical Research Laboratory. "I jumped at the chance to work with the machines and get a taste of what it's like to be a professional in the field."

-Katie Maney, BA '16

## STRENGTHENING GEORGE MASON'S **COMPETITIVE FUTURE**

#### IT'S LESS ABOUT WINS AND LOSSES for

Marvin Lewis and more about building enduring bridges for the long term.

The George Mason University assistant vice president and director of Intercollegiate Athletics recently unveiled his vision with an ambitious five-year strategic plan called "Patriots United. Together We Thrive." The plan aims to enhance student-athlete experiences, strengthen resources, raise competitiveness, curate storytelling and engagement opportunities, and cultivate a championship culture.

"I believe athletics is the front porch of this university, but our job is to unite the community," Lewis says. "In this evolving landscape, our university needs athletics at the forefront, with our basketball programs gaining strong visibility—locally, regionally, and nationally."

Lewis predicts the addition of the Basketball and Academic Performance Center would be a "game-changer" for George Mason. The plan also highlights the need to upgrade the 40-year-old, 10,000-seat EagleBank Arena, which will require up to \$10 million.

"Men's and women's basketball are our flagship programs," says Lewis. "They're the most visible programs for our university, so making sure they have the resources they need is imperative."

Lewis emphasizes the broader benefits of a successful, high-profile comprehensive athletics program, noting the increased visibility can lead to increased student enrollment and attract more academically talented students who might not have otherwise considered George Mason.

Building a championship culture doesn't come easily, and it will require an all-hands-on-deck approach. "This plan will guide our efforts as we continue to elevate George Mason Athletics and deliver on our mission to inspire and transform lives through the power of sports," says Lewis.

-John Hollis

#### **KEY HIGHLIGHTS OF THE PLAN**

There is a \$35 million funding goal to elevate George Mason Athletics, enhance student-athlete experiences, and strengthen the university's competitive position.

#### **BASKETBALL GREATNESS**

- The university's signature men's and women's basketball programs are central to the plan, with \$22.5 million allocated to position George Mason as the unofficial college team of Northern Virginia.
- The plan is focused on attracting, recruiting, and retaining top-tier talent, providing championship-level support, and developing student-athletes to their full potential.
- A significant portion of the financial goal funds the construction of a new Basketball and Academic Performance Center, a 30,000-square-foot facility with practice courts, coaches' offices, locker rooms, a weight room, and an academic support center for all student-athletes.

#### SPORTS PERFORMANCE ECOSYSTEM-

\$8 million will enhance mental health and wellness services, and nutrition and fueling programs, based on student-athlete requested resources.

#### PATRIOT PATHWAYS: CHAMPION TO **CAREER**—\$3 million will provide opportunities for student-athletes beyond sports, including

financial education, career readiness, leadership development, and civic engagement.

#### ATHI FTIC DIRECTOR OPPORTUNITY FUND—

This \$1.5 million fund will invest in collaborations on campus and with local businesses, innovative technology pilots, and special projects to strengthen recruitment and retention efforts.



This plan is part of Mason Now: Power the Possible, George Mason's historic \$1 billion campaign to advance student success, research, innovation, stewardship, and community engagement.



## **BY THE NUMBERS**

2025

George Mason University honored its largest-ever graduating class at Spring Commencement, turning the event's "This Is Your Moment" theme into a tassel-turning time to remember for a record-breaking class of more than

degree and certificate earners.

117 countries
49 states and the District of Columbia

**Martina Cheung**, president and CEO of S&P Global, was the featured speaker.

**Duy Ha Vu**, graduating with degrees in public administration and business, was the student speaker.

6,875 earning bachelor's degrees

MAJORS

Business
Information technology
Computer science
Psychology
Criminology, law and society

3,828 earning master's degrees

TOP MAJORS

Data analytics engineering Computer science Special education Curriculum and instruction Business administration

400 earning doctoral degrees

TOP MAJORS

Education
Psychology
Computer science
Economics
Conflict analysis and resolution

165

Scalia Law School graduates

#### **MASON FIRSTS**



Yevin Goonatilake, BS Computer Science '24, MS Computer Science '25, who in December, at age 15, was the university's youngest graduate to earn a bachelor's degree with a 4.0 GPA. This spring, at 16, he became the youngest person in university history to earn a master's degree.

Melissa Perry, MBA '25, dean of the College of Public Health, became the first alumna to serve as a George Mason dean when she received her MBA.



1 in 4

graduates reports that they are

**FIRST-GENERATION** 

degree earners





## LEARN MORE ABOUT THE GIFT.

go.gmu.edu/ schoolnaming



## GIFT NAMES SCHOOL OF COMPUTING, PROVIDES SCHOLARSHIPS

#### GEORGE MASON UNIVERSITY RECEIVED a

gift from the Kimmy Duong Foundation that will bring the university \$36 million in funding and will name the Long Nguyen and Kimmy Duong School of Computing within the College of Engineering and Computing (CEC).

"We are so grateful to Long Nguyen and Kimmy Duong for their continued support of the College of Engineering and Computing, now culminating in this generous gift," says Dean Ken Ball. "We are proud to steward this gift in support of our students and the commonwealth's Tech Talent Investment Program (TTIP). George Mason is honored to be part of their legacy in Northern Virginia."

The gift will establish three endowments. Two funds within CEC will provide lasting support for scholarships and student success initiatives as well as support TTIP, which aims to increase the number of graduates with computer science, computer engineering, and software engineering degrees. The third fund is for University Life to provide scholarships through the Long Nguyen and Kimmy Duong Scholarship Endowment.

This is not the first significant gift to George Mason from Duong and her husband, who gave \$5 million in 2011 for the state-of-the-art Nguyen Engineering Building. The facility now provides cutting-edge research and education spaces for a new generation of engineering, computing, and information technology professionals.

"Kimmy Duong and Long Nguyen have been good friends to George Mason, recognizing the opportunity our university provides for students to succeed," President Gregory Washington says. "Kimmy came to this country with very little and climbed her way to success, not unlike many of our students who—whether they are first generation or come from difficult socioeconomic circumstances—overcome their own challenges. George Mason has been a leader in computing for many years, and this transformational gift will help ensure that remains the case for many more years to come."

A large portion of the gift will be used for student scholarships in computing, nursing, education, and journalism. By dedicating some of the funds to computing-specific majors, a portion of the gift is eligible for matching TTIP funds ensuring the gift will have a larger impact.

"This transformational gift from the Kimmy Duong Foundation marks a pivotal moment in the Mason Now campaign," says Trishana E. Bowden, vice president for advancement and alumni relations and president of the George Mason University Foundation. "The naming of the School of Computing stands as a powerful testament to their belief in George Mason's mission and their commitment to expanding access—particularly in fields that shape innovation and prepare students for the future."



This gift is part of Mason Now: Power the Possible, George Mason's historic \$1 billion campaign to advance student success, research, innovation, stewardship, and community engagement.





## TEACHER CLOTHING CLOSET HELPS INTERNS DRESS FOR SUCCESS

LEARN MORE ABOUT THE PROJECT.

go.gmu.edu/ teachercloset



THE TEACHER CLOTHING CLOSET, a free resource for teacher interns to get professional clothing, is the first major service project of the EDSE Council—a new student organization named after the course code for special education courses. It was created to foster a supportive, inclusive community within the Special Education Program at George Mason.

Professor Sharon Ray, the council's faculty facilitator, first brought the idea of a clothing closet to the council. "I spoke with several faculty members about how students struggle with resources, specifically professional clothing resources," she says.

Clothing expectations for teachers vary. A first-grade teacher, for example, needs clothing that is professional and modest without being restrictive so they can move quickly and freely. A high school teacher might need attire that is more business casual. The culture of each school also influences their dress code.

Many students lack adequate professional attire when starting their internships, and the cost to buy a new wardrobe is often greater than they can afford.

"Because you're in the classroom for 40 hours a week, most interns end up needing to quit the jobs they've had to pay for college or take reduced hours at them. So, your resources are already limited," says senior Lydia Kraiger, previous EDSE Council president.

Led by EDSE Council secretary and "closet keeper" Claire Johnson, the council curates the closet selection by reviewing each piece donated before it goes on the racks. The council members have made sure the closet includes a variety of sizes and styles, and everything in the closet is teacher approved.

The space itself is small but bright and well organized, with clothing racks, organizational bins, and hangers thrifted from local marketplaces and faculty donations. It smells clean and fresh. It's easy to imagine a student walking into the closet and feeling a renewed sense of empowerment and confidence.

"I'm really impressed with all [the council has] been able to accomplish and the support they've received from the community," says Ray. "And it speaks to George Mason's commitment to education for everyone."

—Sarah Holland



## STAY UP-TO-DATE ON CAMPUS NEWS

Subscribe to The George, the university's online news source go.gmu.edu/TheGeorge



## MEET MASON NATION



In a perfect world, student-athletes have everything they need to reach their potential on the court or field, in the pool, or on the mat. As the director of procurement for George Mason Athletics, CJ Minteer carefully manages and supports the equipment needs of student-athletes across the university.

MAKING EVERY DOLLAR COUNT: Minteer administers the purchase of approximately \$1 million of athletic gear each year. He manages the university's contract with Adidas, which covers most of the uniforms and apparel provided for George Mason's teams, and other companies that provide equipment like baseball bats, basketballs, and golf clubs. "This includes everything from T-shirts to footwear, accessories, backpacks, and more," says Minteer.

BACKING THE TEAM: Supporting student-athletes and their success makes the job meaningful. "Helping our student-athletes with any issues they have with the apparel and making sure that everything is up to snuff on game day are important parts of the job," says Minteer. "We want the athletes to look and feel their best."

FIELD OF DREAM (JOBS): Minteer grew up around college sports, and landing a job in the equipment realm feels like a home run to him. "I've grown up with sports my whole life," says Minteer. "My dad has been a football coach for more than 20 years, and I knew that I ultimately wanted to work in sports."

**BE TRUE TO YOUR SCHOOL:** Minteer studied sport and recreation management at James Madison University and was introduced to equipment management as a student employee for

the football team. He continued working as a part-time equipment manager after graduating until he came to George Mason for a fulltime role.

DRESSED TO IMPRESS: When it comes to uniform design, Minteer balances multiple factors and priorities. Design ideas come from the coaches, and Minteer must follow the university's overall brand guidelines to create a cohesive look across teams. The finished products also must hold up to the heavy demands of collegiate sports.

BUILT FOR THE BIG MOMENTS: Minteer enjoys working behind the scenes to create products that the student-athletes will use during their biggest moments. "There's nothing quite like this job," Minteer says. "It is very behind the scenes. You see your work on game day and at practice."

BIGGEST FAN: Outside work hours, Minteer follows and supports George Mason teams, especially baseball and softball. One of his favorite memories was watching the softball team win the conference championship in 2023 in Fordham, New York. "I drove five hours to see them that day," Minteer says. "It was so uplifting to be there the first time our team won a conference championship for softball. That was a moment that I'll never forget and feeling like I was a part of it."

-Lauren Clark Reuscher, MA '12



## POETRY OUTREACH PROGRAM EXPANDS TO PRINCE WILLIAM COUNTY

#### POETRY ALIVE! IS AN ARTS OUTREACH

PROGRAM designed to inspire students at the Fairfax County Juvenile Detention Center (JDC) through interactive workshops centered on contemporary poetry. Now in its third year, Poetry Alive! has extended its reach to a new site, the Patrick D. Molinari Juvenile Shelter in Prince William County.

Poetry Alive! sends teaching fellows, recruited from George Mason's Creative Writing Program, into centers to teach poetry workshops. At the JDC, the teaching fellows work with students in the center's year-long therapeutic initiative for male residents aged 14 to 17. The Molinari Shelter in Manassas, Virginia, is a nonsecure facility that acts as an alternative to detention and provides emergency placements for youths aged 11 to 17.

George Mason alum Ronald Pannell, MEd '02, PhD Education '12, supervisor of specialized instruction for Prince William County Schools, heard about the JDC poetry workshops through an article in Mason Spirit. While a doctoral student, Pannell had done research on strategies using written expression to help elementary school students with emotional and behavioral disabilities. He immediately saw the value of implementing a poetry program at the shelter.

Pannell secured funding through a Virginia Department of Education grant and collaborated with Poetry Daily, which runs Poetry Alive!, to bring the program to Molinari in fall 2024. MFA graduate students Katey Funderburgh and Nicholas Ritter lead the Molinari program.

"We spend each session introducing the students to new poets, discussing what different poems mean and how they're crafted, and then we watch and listen as the students take these tools into their own hands," says Funderburgh. "Whenever I am lucky enough to hear a student read their own poetry aloud, I remember that this is why I'm here, this is what poetry is for."



Pannell says the youth at the shelter really enjoyed the workshops. "It gave them another outlet to express themselves."

The teachers working at Molinari benefited too. Pannell says that Funderburgh and Ritter have passed on skills to the faculty there, enabling them to support the students as they explored writing and journaling outside of the workshop. W

-Esther Goldberg and Colleen Kearney Rich, MFA '95



In recognition of the university's commitment to accessibility, return on investment, and upward mobility, the Carnegie Foundation for the Advancement of Teaching and American Council on Education named George Mason University to the highest tier of its list of Opportunity Colleges and Universities: Higher Access, Higher Earnings. George Mason is one of just five very large public universities nationally to achieve the Carnegie Foundation's top research classification and top designation for student access and career success. In the 2025 classifications, 479 institutions have been identified as Opportunity Colleges and Universities.

## **FALL INTO ARTS AND ATHLETICS** AT GEORGE MASON

#### **AUGUST 28**

#### **MEN'S SOCCER**

George Mason vs. UVA, 7 p.m. with fireworks following the game

**GEORGE MASON SOCCER STADIUM** 

#### **SEPTEMBER 21**

JEREMY JORDAN IN CONCERT

**HYLTON PERFORMING ARTS CENTER** 



#### **SEPTEMBER 27**

ARTS BY GEORGE!

#### AN EVENING WITH **DARREN CRISS**

ARTS by George! has raised more than \$4.6 million since it began in 2006. The evening begins by showcasing the remarkable talents of Mason Arts students throughout studio and performance spaces on the Fairfax Campus and culminates with a performance in the Center for the Arts followed by a dessert reception onstage with the Tony Award winner.

**CENTER FOR THE ARTS** 



#### **SEPTEMBER 20**

#### **WOMEN'S SOCCER**

George Mason vs. GW, 6 p.m.

40th Anniversary Celebration of George Mason Women's Soccer National Championship

**GEORGE MASON SOCCER STADIUM** 



#### **OCTOBER 4**

**MASON ARTIST-IN-RESIDENCE** 

PAPERMOON PUPPET THEATRE HARRIS THEATRE

#### **NOVEMBER 7**

**GEORGE MASON SCHOOL OF DANCE** 

**FALL: DANCE INNOVATIONS** 

**CENTER FOR THE ARTS** 



#### **THROUGH DECEMBER 15**

MASON EXHIBITIONS

Offerings to the Potomac: Acknowledging Indigenous Place

**BUCHANAN HALL ATRIUM GALLERY** 

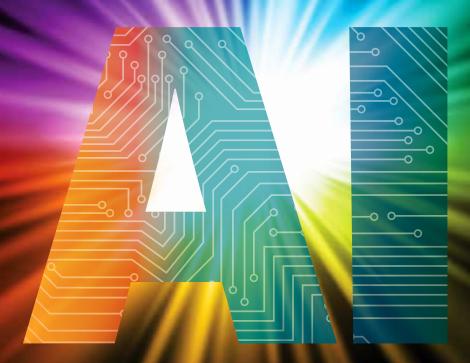


MASON ARTS EVENT CALENDAR cvpa.calendar.gmu.edu



GEORGE MASON ATHLETICS gomason.com

# POWERED BY



As AI reshapes industries, George Mason University is preparing future leaders for the challenges they will encounter and working to harness these technologies and their potential to help build a better world.

eorge Mason University researchers are using all areas of artificial intelligence (AI) to create new and better solutions. They are using machine learning to predict social isolation among caregivers, detect bruising across a variety of skin tones, and improve the diagnosis and treatment of vision problems. Researchers are using natural language processing to develop a technology that can automatically translate lesser-known languages. They are working with augmented reality to improve workplace safety. And that's just a glimpse of the work, powered by AI, being conducted by George Mason faculty and students.

As the largest and most diverse university in Virginia, George Mason is leading the future of inclusive Al and developing responsible models for Al research, education, workforce development, and community engagement within a modern university.

#### **GEORGE MASON'S APPROACH**

Led by Amarda Shehu, the university's inaugural vice president and chief artificial intelligence offi cer (CAIO), and an Al Visioning Task Force, George Mason is working with partners throughout the region and across the state to build a nexus of collaboration and resources called Al<sup>2</sup>Nexus.

As a model for universities, Al<sup>2</sup>Nexus is based on four key principles: integrate Al to transform educa tion, research, and operations; inspire Al to advance higher education and learning for the future work force; innovate Al to lead in responsible Al enabled discovery and advancements across disciplines; and impact Al to drive partnerships and community engagement for societal adoption and change.









"I knew when I started my research in this field over 20 years ago that AI would unleash enormous speed and power in innovation, which is at the heart of what drives George Mason. Power lies in our ability to harness this technology in sustainable and democratic deploy ment that improves society and the human condition."

Amarda Shehu, CAIO



## NTEGRATE

## **INTEGRATE** Al

#### **Advancing Operations with PatriotAl**

LEARN MORE ABOUT THE AI IN EDUCATION SUMMIT.

go.gmu.edu/ aiedsummit



George Mason is reimagining operational excellence, equipping all students, faculty, and staff with access to cutting-edge generative AI models through George Mason's enterprise AI platform, PatriotAI, which is the first major outcome of our strategic partnership with Microsoft and Cloudforce.

PatriotAI is a suite of six specialized AI tools, called agents, offering secure, university-managed access to large language models (LLMs) that can aid academic work and student life. Codeveloped with members of the campus community, these AI tools are designed to enhance learning, instruction, research, and administration across campus.

In addition, the university has established guiding principles for the use of Al. These resources provide framework and guidance for the responsible and ethical use of Al across the academic community to help faculty, staff, and students. These guidelines are expected to evolve as the tools, student expectations, and pedagogical approaches change.

"When we talk about 'integrate" in the context of AI, we're not just referring to adopting new tools—we're talking about rethinking how we work, teach, and serve," says Charmaine Madison, George Mason's chief information officer. "AI is no longer optional; it's a transformative force that's already reshaping higher education. The challenge before us isn't whether to use AI, but how to integrate it thoughtfully and effectively into the fabric of our university."

#### **Patriot Chat**

A general-purpose conversational assistant

#### **DocuMate**

A large-scale document analysis assistant

#### **PatriotPal**

A virtual assistant for students, providing George Masonspecific information about administrative procedures, academic policies, and services

#### **NourishNet**

A resource connector for student food insecurity

#### **CourseMate**

A student learning assistant that helps students understand lecture content, analyze research articles, interpret textbook materials, and prepare for exams

#### **SyllaBright**

A course design assistant that helps faculty develop and refine educational materials



"Artificial intelligence is transforming industries, reshaping societal norms, and challenging long-standing ethical frameworks. This course [AI: Ethics, Policy, and Society] provides critical insights into the ethical, societal, and policy implications of AI at a time when these technologies are increasingly deployed in areas like health care, criminal justice, and national defense."

—Jesse Kirkpatrick, codirector of the Mason Autonomy and Robotics Center

## **INSPIRE** Al

#### **Designing Curriculum for the Future Workforce**

As a leader in preparing career-ready talent for the Washington, D.C., metropolitan region, George Mason is developing courses, curricula, and degree programs to better prepare our students for a rapidly changing world.

- AI: Ethics, Policy, and Society, a interdisciplinary graduate course, debuted in spring 2025. Designed to prepare students to tackle the ethical, societal, and governance challenges presented by AI, this course draws expertise from the Schar School of Policy and Government, the College of Engineering and Computing, and the College of Humanities and Social Sciences.
- In fall 2025, a new undergraduate course open to all students, AI4AII: Understanding and Building Artificial Intelligence, taught by Shehu, will be offered for the first time.

- ❖ In addition to a master's degree in computer science and machine learning, a 14-credit ethics and AI minor for undergraduates of all majors, and a responsible AI graduate certificate, George Mason is Virginia's first public university to offer a stand-alone master's degree in AI. The first students in this program begin this fall.
- A new PhD in Robotics, recently approved by the State Council of Higher Education for Virginia, is the first of its kind in the commonwealth and is already drawing interest from students.

George Mason also partners with tech leaders like Google and Amazon Web Services to offer certifications in data analytics, cybersecurity, and cloud computing, enhancing student expertise.





#### USING ALIN THE CLASSROOM

At University Career Services, career counselors are already seeing the impact of AI on graduates' job searches. Many companies are expecting grads to arrive well versed and prepared to handle AI in the workplace. Faculty members are preparing these students by introducing AI in the classroom.

- ♦ In the Costello College of Business, students are introduced to AI and LLMs in ACCT 661 Advanced Accounting Analytics I, and in later courses, the students are asked to think creatively about how they can use AI to change the future of accounting and auditing, says Professor Steven Maex.
- ◆ The capstone project in Maex's ACCT 771 Audit Analytics class asks students to develop a new tool or use case for AI or analytics that can improve the efficiency or effectiveness of tradi tional ways of working.
- ◆ In her MGMT 421 Advanced Human Resource Management course, Cindy Parker, BS Psychol ogy '92, MA '94, PhD '98, has students use generative AI to help them develop a structured interview guide, after they do some initial work on their own. "I teach them some prompt engineering best practices, and they are asked to critique the output generated by AI," says Parker.
- ◆ Professor Tyler Cowen, BS Economics '83, is using his book GOAT: Who Is the Greatest Econ omist of All Time and Why Does It Matter? as the primary text for his ECON 895 History of Economic Thought course. Published in GPT 4 and Claude 2, the book comes with a chat bot, allowing students to ask questions and receive responses.

## INNOVATE A

#### **Building a Responsible Ecosystem**

George Mason researchers are focused on tackling the world's most urgent challenges with a vision for societal change. The university's ecosystem of cuttingedge research, incubators and other resources for entrepreneurs, a robust tech transfer program, and industry partners helps foster interdisciplinary collaborations and substantiate a cycle between foundational and user-inspired AI research within ethical frameworks.

The university hosts workshops, conferences, and public forums to shape the discourse on AI ethics and governance while forging deep and meaningful partnerships with industry, government, and community organizations to develop impactful AI technologies for a richly diverse global society.



#### **Schar School of Policy** and Government

researcher J. P. Singh has been awarded a grant from the U.S. Department of Defense's Minerva Research Initiative to study the economic and cultural determinants for global Al infrastructures and their implications for international security.



#### **College of Public**

**Health** researchers Farrokh Alemi and Kevin Lybarger have received George Mason's first Patient-Centered **Outcomes Research** Institute award for developing an AI system, using LLMs, that helps patients find the right depression medication.



#### College of Engineering and Computing

researchers Abolfazl Safikhani and Tianshu Feng are using machine learning to develop a tool to improve transparency and assist government decisionmakers and urban planners with land use and development.



#### **Costello College of** Business researchers Yi Cao and Long Chen are

exploring how individual investors can use LLMs, like Gemini, to glean market insights from publicly available data about companies.

LISTEN TO THE EXPERTS.

go.gmu.edu/ aiexperts



#### LISTEN TO SOME AI-RELATED EPISODES ON THE ACCESS TO EXCELLENCE PODCAST

#### **Amarda Shehu**

"Navigating AI's Risks and Rewards"

#### **Missy Cummings**

"Artificial Intelligence Is Artificial and Not Intelligent"

#### **Jamil Jaffer**

"Cybersecurity and the Global Threats of Tomorrow"





## PACT

## **IMPACT** Al

#### **Driving Community Engagement and Adoption**

The university's Al-in-Government Council is a partnership between academia, public-sector tech providers, and government. It is a trusted resource for advancing Al approaches, governance frameworks, and guardrails to guide the development and deployment of responsible Al in government.

Leading experts and faculty also participate in statewide efforts. Virginia Governor Glenn Youngkin appointed Jamil Jaffer, the founder and executive director of the National Security Institute (NSI) at George Mason's Antonin Scalia Law School, to his AI Task Force, which is working with legislators to regulate rapidly advancing AI technology. Jaffer and NSI Fellow Zach Graves are two of the 10 appointees to the task force.

Shehu and Padhu Seshaiyer, a professor of mathematical sciences in the College of Science, were appointed by Youngkin to the State Council of Higher Education for Virginia's EO30 task force. EO30 refers to Youngkin's Executive Order 30, which calls for the "Implementation of Standards for the Safe Use of AI Across the Commonwealth."

Even the summer camps are getting involved. The Accelerated College and Employability Skills (ACCESS) Academy lab school brought high school students to Fuse at Mason Square for an Al Summer Camp where students explored the basics of machine learning through hands-on projects. Students in the monthlong Al4Defense summer program not only gained technical and communication skills but also engaged in customer discovery—working directly with mission partners to define problems and tailor Al solutions accordingly.

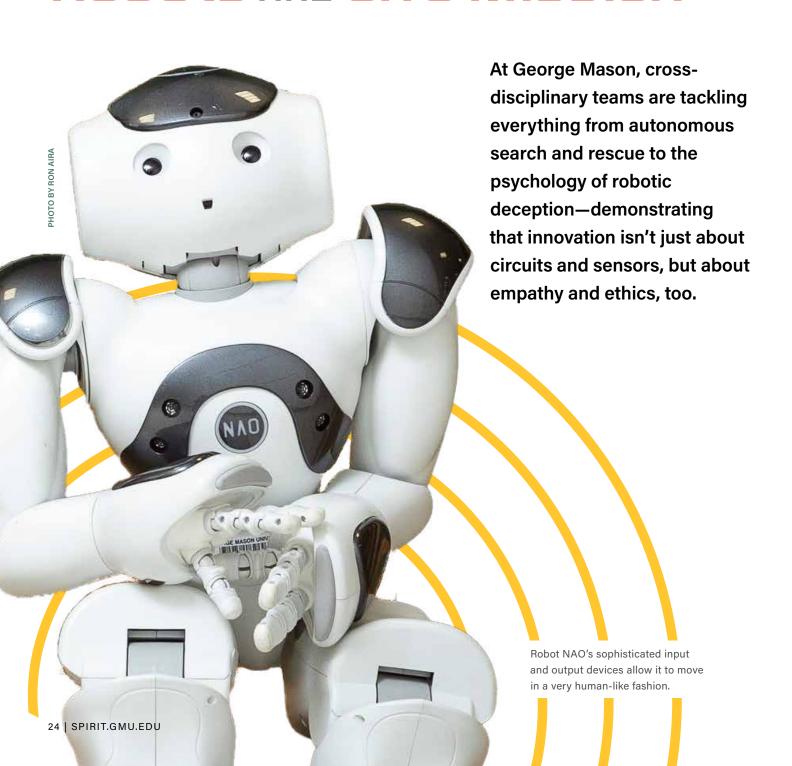
In May, George Mason hosted the AI in Education Summit with the State Council of Higher Education for Virginia, bringing K-12 educators together with thought leaders from academia and industry.



### **CODE, COMPASSION, AND COMPETITION:**

## **GEORGE MASON'S**

## Robots are on a Mission



t George Mason University, we love our robots. You can't visit the Fairfax Campus without seeing a robot roll by. We even made the national news by being the first U.S. university to use Starship robots for food delivery.

But George Mason's affinity for robots and robotics goes far beyond having a pizza or a latte delivered to a residence hall. Our students and faculty are building and training autonomous robots for a variety of purposes and studying how humans and machines interact to better understand what it means to use and even depend on these technologies.

Cross-disciplinary research centers, such the Mason Autonomy and Robotics Center, the Center for Advancing Human-Machine Partnerships, and the Applied Psychology and Autonomous Systems (ALPHAS) Lab, are just a few of the units across the university tackling this work and including students in the research.

These stories provide a snapshot of some of the work currently taking place.

#### **DRONES AND ROVERS TO THE RESCUE**

The black quadcopter drone surveyed the field in two quick swoops. In just a matter of seconds, it picked up a signal and flew to the sidelines where it landed itself. A small ground rover took off, bumping over the grass to drop a first aid kit a few feet from the goal. Team members on the side of the field exploded with cheers and high fives.

The entire search and rescue process took less than two minutes.

In April, five university teams gathered at the Xelevate drone ecosystem field in Leesburg, Virginia, to test their autonomous programming mettle via ground and air vehicles in the Raytheon Autonomous Vehicle Competition. This was George Mason's second year in the competition, which they won last year.

The team consisted of 16 students ranging from sophomores to doctoral students in computer science, electrical engineering, and mechanical engineering. As the reigning champs, they had a lot to prove.

The challenge rules change every year, so the teams can't just copy their predecessors' codes. This year, the drones and rovers had to perform a rescue mission: Find a randomly assigned "survivor" in a field of battle and send first aid. The faster the find and the closer the kit, the higher the score.

"Our strategy was for a drone to scout the area first, find the target, and then drive another ground vehicle robot to deliver the first aid kit," says the team's faculty lead and computer science professor Xuesu Xiao.





Above, a quadcopter searches for its target as the rover and judges stand by. Left, judges measure the distance from the target to the roverdelivered first aid kit.

The team programmed six flying drones and a ground robot that communicated with one another—and nothing else. That means that the programmers had no immediate control over the vehicles; they set their autonomous creations free and hoped that they had done a good job coding them.

Overall, their robots performed exceptionally, managing to cut their delivery time and distance from target to less than a minute and 57 inches, respectively. They were just nudged out, however, by first-place University of Southern Florida and second-place Virginia Tech.

"It was definitely very tight between the top three," says electrical and computer engineering professor Cameron Nowzari. There was only a two-point difference between first and second place, and one point between second and third.

Still, the team wasn't disappointed with how they performed. Their robots were a labor of love, and they met the challenge in a big way.

-Jenn Pocock



PhD student Andres
Rosero with Pepper,
a robot from the
ALPHAS Lab.

## DECEPTION AND HUMAN-ROBOT INTERACTIONS

How likely are humans to trust a robot, especially if that robot has the capacity to lie? This is the question George Mason psychology doctoral candidate **Andres Rosero**, MA Psychology '22, is exploring in his research on human-robot interaction.

"As robots become more integrated in human society, their roles will transition into those of a collaborative nature rather than as tools used by people," says Rosero, who works in the ALPHAS Lab in the Human Factors and Applied Cognition Program. "In response, these robots must be programmed with enough social awareness to navigate complex interpersonal interactions to build relationships and maintain a positive interaction with the humans they share their environment with."

Almost 500 participants took part in Rosero's study, which he conducted with George Mason graduate teaching assistant Harris Kelly and psychology professor Elizabeth Phillips. The study, which received international media attention, gauges how likely participants are to accept a lie told by a robot in various situations.

Participants ranked specific scenarios involving robot deception and evaluated how deceptive the lie was, whether they approved of the robot's actions, and if the robot's behavior could be justified. The study placed these scenarios into three different environments: medical, domestic, and retail.

"The goal is to examine human perceptions of AI and robot collaborations across different complex social interactions," explains Rosero. He was also looking at moral norms, and how when robots break these norms, whether humans can accept and justify the robot's behaviors.

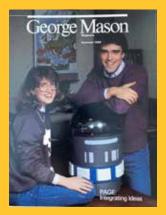
Each environment presented a unique quandary for the participant. For example, in the medical environment, the robot lied to a patient with Alzheimer's disease, telling the patient that her deceased husband was coming home. In the other environments, the robot was evasive rather than uttering false statements.

Overall, participants believed the robot's lie in the first scenario, but once the robot's capacity for deception and manipulation was revealed, participants were less trusting.

Technology's ability to potentially conceal its true capabilities remains a concern for Rosero. "Any technology that is designed with the intention of being utilized by people is an intersection of that technology and the humanities," says Rosero. "Our challenge as applied psychologists is to design experiments that properly explore this interaction to provide direction to the development of these technologies in the real world."

-Marissa Joyce, BA '22, and Camille Rimbawa

## A BRIEF HISTORY OF GEORGE Mason Robots



↑ 1986
George Mason's first robot named R B5 X graces the cover of an early alumni magazine.

#### **▽ 2010-14**

RoboPatriots take on the world.



Erica Cohen, MEd
'15, uses a VGo robot
to attend the College
of Education and
Human Development's
Degree Celebration
while she is at her
child's graduation 250

miles away.





**201B** Mechanical engineering students build a robot called Thunder Rat to inspect campus storm drains.



2019 Bumblebee, a robotic fish and computer engineering capstone project, goes for a swim in Mason Pond.

Starship robots begin rolling out for food delivery on the Fairfax Campus.



#### √ 2023

George Mason experiences the rise of the lighter-than-air robotic vehicles.



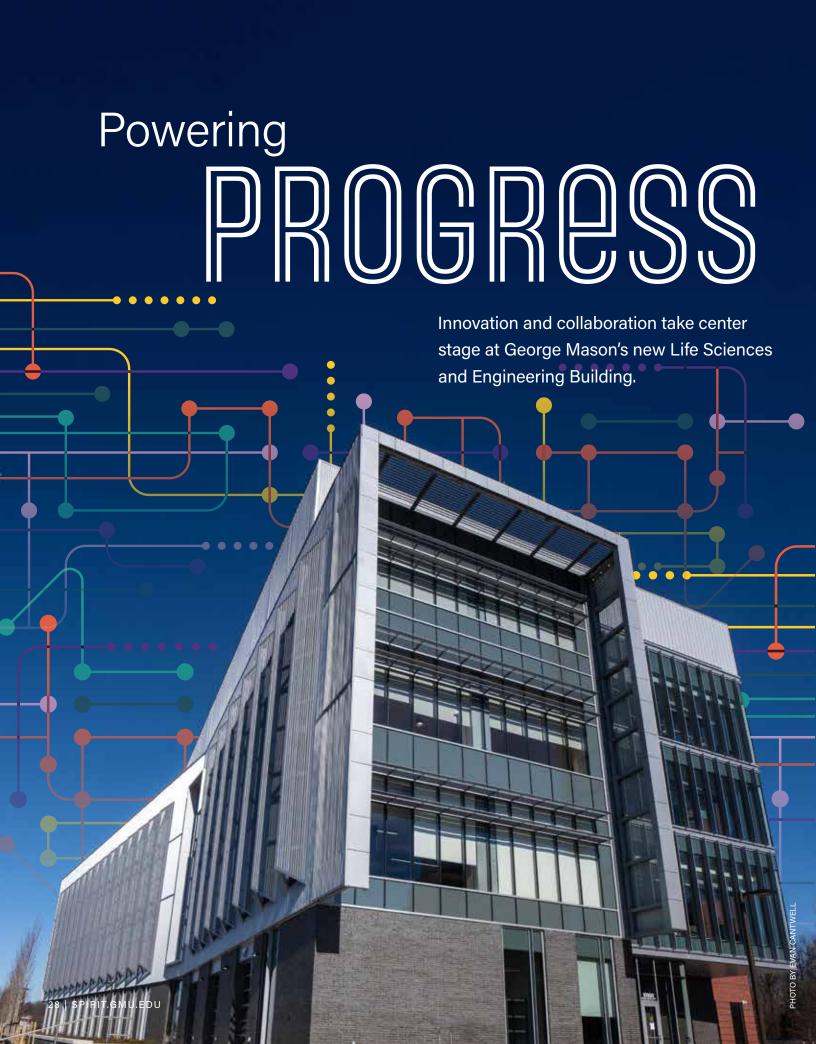


An autonomous water robot collects water samples at the Potomac Science Center.



< 2024
A George Mason team designs a rescue robot to navigate environments filled with smoke.

PHOTO PROVIDED



hen George Mason University opened the doors to its highly anticipated Life Sciences and Engineering Building in Manassas, Virginia, it was more than the unveiling of a new academic space—it was the beginning of a new transformative era for the university and the region.

Situated at the heart of the university's Science and Technology Campus, this state-of-the-art facility will empower students across a wide range of disciplines to explore, innovate, and push the boundaries of science and engineering.

Designed to meet the growing demand for highly specialized instructional labs, smart classrooms, and support spaces, the building is already enabling greater hands-on learning in disciplines like athletic training and kinesiology, microbiology, chemistry, engineering, forensic science, robotics and autonomous vehicles, and more.

"The Life Sciences and Engineering Building marks a major state investment in our outstanding George Mason faculty to educate and inspire our students— Virginia's next generation of leaders, researchers, innovators, and problem solvers," says George Mason President Gregory Washington. This addition also provides increased university access for students in Prince William and Fauquier Counties, the western part of Fairfax County, the cities of Manassas and Manassas Park, and beyond, which is why the General Assembly and the Prince William County delegation, led by Delegate Luke Torian, were eager to help make this building a reality. Torian, who is chair of the Virginia House Appropriations Committee, and the delegation were instrumental in helping to secure strategic support and state funding for the building.

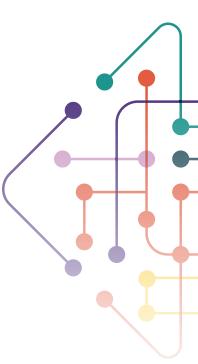
#### **INSPIRING THE NEXT GENERATION**

Encompassing 132,000 square feet of space, the building is designed to promote collaboration and engagement among students and faculty. The ground-level engineering labs and student design competition bays open directly onto the campus's exterior pathways, allowing visibility for the work happening inside.

One of the first groups to take up residence was Patriot Motorsports, a club for students who want to explore the inner workings of automotive vehicles. Over the course of the spring semester, seniors in mechanical engineering revved it up a notch with



Mechanical engineering major Andrea Dortch, who graduated in May, is working with Narly, a lighter-than-air vehicle, in the multistory aviary.





their capstone project—designing a control system for the club's Formula SAE race car.

And race cars aren't the only vehicles in the building. This new space boasts a multistory aviary lab where students can test blimps, drones, and anything else that needs extra airspace to move around. One capstone project taking advantage of the lab is an autonomous flapping wing lighter-than-air vehicle, developed by mechanical engineering Professor Daigo Shishika's students.

This spring, engineering capstone teams were also using the prototyping space on the second floor to collaborate on projects. "Once the first-floor machine shop is complete, this space will also be used for staging and constructing physical prototypes," says George Mason mechanical engineering professor Charles White.

One of the building's special features is the blending of laboratory and teaching spaces. All the mechanical engineering labs, including the firstfloor advanced manufacturing and wind tunnel labs, contain student desks and IT lecture setups so that seminars can turn into hands-on demonstrations where students can practice in real time.

Above, a student demonstrates the equipment in the School of Kinesiology's Physiology Assessment Lab. Left, one of the forensic science labs.







The mechanical engineering grads who made up the Patriot Motorsports team are (from left) Andrew White, Jack Gifford, Skylar Perdue, and Grant Miller.

And these areas barely scratch the surface of what the building has to offer. For mechanical engineers, in addition to the wind tunnel and advanced manufacturing labs, machine shop, robotics lab, and prototype studio, there is a 3D print studio, a materials characterization lab, a sustainable energy and photonics area, and a thermofluids lab.

For civil engineers, there is a dedicated space for the American Society of Civil Engineers concrete canoe competitions. Bioengineers have access to cutting-edge studios as well, including a tissue engineering lab.

## ANCHORING PRINCE WILLIAM'S INNOVATION DISTRICT

As an epicenter of innovation, creativity, and opportunity, the Science and Technology (SciTech)
Campus plays a critical role in helping George
Mason generate solutions for the world's most pressing issues. Strategically located in the technology and innovation corridor that runs from Washington, D.C., to Richmond and encompasses the George
Mason ecosystem of campuses, Small Business
Development Centers, and community college partnerships, the SciTech Campus is also an anchor for Prince William's growing Innovation District, which includes the development of two residential and commercial town centers.

"This facility, and the advancements it will produce, further establishes the Science and Technology Campus, and this Innovation District, as an anchor of the economic corridor that runs from Mason Square in Arlington to the Fairfax Campus to here in Manassas, further entrenching George Mason as a major driver of the prosperity of our region and state," says President Washington.

The SciTech Campus opened in 1997 thanks to a university partnership with the City of Manassas and Prince William County, and it has far exceeded its initial goal of fostering groundbreaking research across disciplines. The campus is also home to the Virginia Serious Game Institute; the Biomedical Research Laboratory, one of 13 regional biocontainment laboratories established through the National Institute of Allergy and Infectious Diseases; and the Forensic Science Research and Training Laboratory, one of only nine human donor forensic science labs in the United States.

In June, Governor Glenn Youngkin announced that the commonwealth will invest \$2.6 million in the Innovation District.

"The planned town centers will create a stronger link between the campus and the surrounding community," says **Colby Grant**, BS Health, Fitness, and Recreation Resources '05, director of administration and operations for the SciTech Campus. "Combined with the new Life Sciences and Engineering Building, these developments further establish the campus as a dynamic hub for science, technology, the arts, entertainment, and recreation."

Lauren Clark Reuscher and Jenn Pocock contributed to this article.





#### Trial by Virtual Fire

#### FOR FIREFIGHTERS, EVEN TRAINING IS

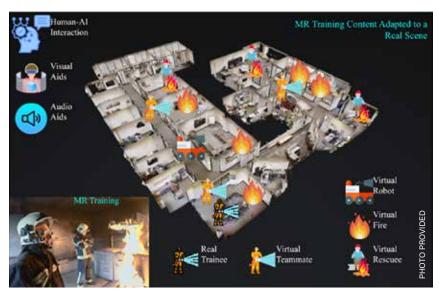
A RISK. According to the U.S. Fire Administration, 16.6 percent of all firefighter fatalities in 2024 took place during training exercises. George Mason researcher Craig Yu is hoping to change that statistic.

Yu has been developing augmented and virtual reality training for most of his career, and he has a particular interest in exploring how artificial intelligence (AI) and emerging technologies could help research on human development and sports science. With the support of a National Science Foundation grant, Yu and Joel Martin, an associate professor in the School of Kinesiology, are developing just that: an augmented reality program that could help train firefighters while minimizing risk.

"Firefighters have high rates of injuries, and many injuries happen during training. There is a need for training technology that can replicate aspects of emergencies while minimizing the injury risk and physical burn," says Martin.

Martin has spent the past few years working with Fairfax County Fire and Rescue to determine how they can reduce physical strain to firefighters during training exercises. "I think that immersive reality training can help to meet training needs while minimizing the physical risks of performing certain drills."

An example of a mixedreality training.



Augmented—or mixed—reality uses devices such as phones or a headset to overlay 3D computergenerated content onto the real world. An increasingly accessible tool, you can find augmented reality in applications like IKEA furniture in-room previews at your house, dinosaur encounters in a Smithsonian museum, or catching Pokémon in your neighborhood. The new training would utilize augmented reality to create realistic training scenarios for firefighters.

Based on a 3D digital twin of the room, the program uses AI to analyze what's in the space and create a realistic outbreak of fire where it is most likely to start and spread—and where civilians are most likely to be.

"The program understands the environment, and it will be refined with additional input from professional firefighters," says Yu.

Yu also notes that the scenario can be adapted for different experience levels, increasing sophistication and complexity as the trainees learn and improve. It also allows them to practice scenarios that would be difficult or impossible to replicate in a live burn, such as how to best evacuate or rescue civilians.

Martin and Yu are in the early phases of development but hope to deploy their initial training designs with Fairfax County Fire and Rescue soon. They both hope to see further incorporation of AI and augmented reality technology in firefighting tools, such as headsets that can scan the environment and offer real-time feedback about potential dangers, exit strategies, and health metrics as firefighters enter hazardous zones.

"I don't ever see us replacing real fire training," says Yu, "but this is a means to augment the training to improve the health and safety of the firefighters, as well as make training easier to deploy in a variety of buildings and circumstances. Al allows us to rapidly analyze human performance and then adaptively synthesize training programs to address weakness we observe." W

—Sarah Holland



#### ▲ Advancing Sensor Tech for Foggy Situations

DEVICES THAT RELY ON SENSORS to accurately navigate and perceive the world around them are becoming more commonplace, from drones to autonomous vehicles to ground robots on rescue missions. George Mason researcher Parth Pathak is working to ensure the sensors have 20/20 vision.

Most sensors rely on cameras or light detection and ranging (LiDAR) to track objects around them. "But they don't work very well when there's smoke, fog, or generally a visually degraded environment," says Pathak, an associate professor in the Department of Computer Science. "The mmWave wireless radar sensors that we're working on aren't affected by that. If there is dirt on the sensor—that's okay. They can see through things and see around things."

Imagine a rescue robot going into a building filled with smoke, trying to navigate with little to no visibility. "These wireless sensors can enable them to perceive the environment and even self-localize without cameras, LiDARs, or other positioning systems," Pathak says.

The mmWave devices don't capture as much data as regular sensors, which is important for privacy concerns. A major disadvantage with current devices, is that when a sensor depicts an object such as a car, the resolution is not particularly good. Pathak is using multiple robots to improve results as well as navigation and perception. In a rescue mission, a swarm of robots can share their data, allowing them to collectively "see" a better picture.

"They can self-localize based on what they see, like how our brains work. Part of the work is developing very good signatures of what they see from these very low resolution images," says Pathak. "We can build 3D models of a room by scanning it through the wireless sensors and using machine learning to capture and recreate every detail. This is something that these sensors weren't designed for. We are developing custom-tailored deep learning models



of wireless sensing, essentially pushing the limits of what they can perceive using wireless signals."

Pathak received \$660,000 in funding from the Army Research Office (ARO) for this work, some of which is done in collaboration with colleagues at the University of California, Davis, where he was a post-doctoral researcher. ARO's funding also supports testbed-to-prototype development and solution evaluation.

Computer science PhD students Ahmad Kamari and Rezoan Ahmed Nazib are working on the project, along with three high school students who participated in prototyping over the summer of 2024 as part of George Mason's Aspiring Scientists Summer Internship Program.

From left, Rezoan Ahmed Nazib, Parth Pathak, and Ahmad Kamari with a rescue robot that can "see" through smoke and fog.

—Nathan Kahl



Based on their years of research studying how student-athletes move, George Mason bioengineering professors Parag Chitnis and Siddhartha Sikdar have created a start-up called Myokinetics LLC with the goal of providing personalized rehabilitation programs for injured athletes that can help them recover faster and prevent them from getting injured in the future.

LEARN MORE AT go.gmu.edu/myokinetics.





#### AI-Powered Interactive Games Provide Emergency Response Training

#### **USING CUTTING-EDGE AI-AUGMENTED**

GAMES, George Mason researchers are transforming complex challenges into interactive learning experiences that build skills and resilience.

Inspired by a George Mason-hosted webinar where the Arlington County Department of Public Safety Communications and Emergency Management shared their training needs, Shima Mohebbi of George Mason's College of Engineering and Computing led a team that created two interactive Al-powered games—Go-Repair and Go-Rescue—to train utility managers and volunteers to make critical decisions in scenarios like infrastructure repairs and hurricane disaster evacuations.

Built as part of a National Science Foundation initiative to develop simulation-based games for resilient infrastructure, the games simulate emergency scenarios and provide participants with tailored insights into their decision-making process. By using advanced algorithms, the games create a dynamic learning environment where strategies can be tested and adapted in real time.

"Go-Repair and Go-Rescue aim to provide volunteers and utility managers with realistic emergency scenarios in a comfortable environment, free from the stress and panic of an actual crisis," says Mohebbi. "Through Al optimization and reinforcement learning models, players can assess whether their decisions lead to better or worse outcomes compared to the Algenerated solutions, helping them improve their skills in making science-informed decisions."

Traditional emergency training has relied on Federal **Emergency Management Agency guidelines and** in-person role-playing sessions known as "war gaming." While valuable, these methods have limitations in scope, flexibility, and interactive feedback. The AI-powered games introduce a new dimension to address these gaps.

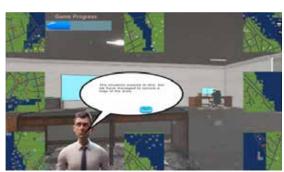
The project's impact is already gaining recognition. The Institute of Industrial and Systems Engineers (IISE) named Go-Repair as one of four finalists in their 2024 Data Analytics and Information Systems Student Mobile App Competition.

"The feedback and engagement we've received, from Arlington County to the IISE community, are vital to advancing this project," says Mohebbi. "The collaboration fosters innovation and ensures that our work aligns with the real needs of emergency responders and volunteers."

Looking ahead, the team, which includes PhD student Pavithra Sripathanallur Murali and Nischal Newar, MS Computer Science '24, is incorporating feedback to introduce more complex resource allocation tasks and expand participation to include more George Mason students and utility managers. By continuously refining the games with fresh input, the goal is to develop a versatile and effective training tool for emergency response and preparedness. As the project evolves, the team plans to expand its reach, offering a smarter, more scalable solution for communities nationwide.

—Paola Duran





SEE THE GAMES IN ACTION.

> go.gmu.edu/ traininggames





## ✓ Tracking Criminal Networks with Artificial Intelligence

CRIMINAL NETWORKS ARE LARGE, DYNAMIC, AND CONSTANTLY EVOLVING. George Mason researcher Carlotta Domeniconi is the principal investigator on a groundbreaking project aimed at understanding and modeling human smuggling networks.

She is working with George Mason colleagues Guadalupe Correa-Cabrera and Sean Luke to develop advanced machine learning techniques to analyze publicly available data and uncover the intricate workings of such networks between Mexico and the United States.

While Domeniconi and Luke, both Department of Computer Science faculty members, bring expertise in artificial intelligence and machine learning, Correa-Cabrera of the Schar School of Policy and Government specializes in border studies, U.S.-Mexico relations, international security, migration studies, and illicit networks.

A significant challenge in this project is the sparsity and complexity of the data, says Domeniconi. "The secret nature of criminal networks makes it practically impossible to gather useful data."

This led to the team's innovative approach of using publicly available text data, including past cases of prosecuted smugglers at both the state and federal levels in the United States as well as social media posts by and news articles about smugglers. They are collecting data from the 1980s to 2024 to analyze the temporal dynamics of these networks.

"There are videos of smugglers actually showcasing people traveling across very difficult areas from Central America," Domeniconi says, as an example. "You can extract a lot of information about the routes they take, where they cross the borders, and the means they use." The team is using natural language processing and deep learning models that are pre-trained on vast amounts of text data, enabling them to recognize and extract meaningful information from the data the team is collecting.

The team, which includes two doctoral students, is working on automating the process of building and analyzing these criminal networks using large language models and graph mining techniques. By visualizing these networks as knowledge graphs, they aim to mine behavioral patterns and understand how these networks adapt to changes in policy enforcement. Ultimately, this project could provide a methodology applicable to various criminal networks beyond human smuggling.

"The current project bridges the gap between machine learning and social science," says Correa-Cabrera. "We can replicate this same model and methodology to analyze legal cases of drug smuggling, money laundering, and arms trafficking, thereby modeling and explaining the evolution of these activities over the past few decades."

Domeniconi's pioneering work in modeling human smuggling networks is a testament to the power of Al in addressing complex social issues.

The insights gained from this research could significantly enhance national security measures, offering a strategic advantage in the fight against human smuggling and those who perpetrate this crime. It's a project that is thoroughly George Mason, with its collaboration across disciplines, its bold approach to solving a problem, and its application of AI in ways that are both compassionate and human forward.

—Teresa Donnellan



## Recently published works by George Mason faculty

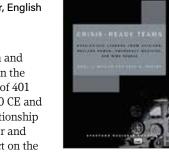


## Vivek Narayanan, associate professor, English Department

The Kuruntokai and Its Mirror

Hanuman Editions, May 2024

This book is a fractalized translation and reinterpretation of a classical work in the Tamil Sangam canon, an anthology of 401 short poems composed between 100 CE and 300 CE. The poems explore the relationship between the interior and the exterior and the personal and the public to reflect on the fractured nature of poetry itself.

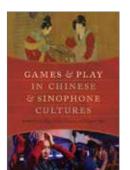


## Crisis-Ready Teams: Data-Driven Lessons from Aviation, Nuclear Power, **Emergency Medicine, and Mine** Rescue

Seth A. Kaplan, professor, Psychology Department, with Mary J. Waller

Stanford Business Books, September 2024

The book is based on unprecedented research, involving audio and video recordings of hundreds of hours of crisis simulations, and explores crisis team dynamics, key success behaviors, and why some teams perform so much better than others.

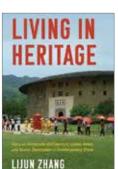


## Games and Play in Chinese and **Sinophone Cultures**

Douglas Eyman, associate professor, English Department, and Hongmei Sun, associate professor, Modern and Classical Languages Department, with Li Guo (Eds.)

University of Washington Press, July 2024

In the scholarly field of game studies, relatively little has been published on the history of games and gaming in China. This volume examines representations of gender, class, materiality, and imagination, while addressing ways in which games inhabit or transform cultural and social practices.



## Living in Heritage: Tulou as Vernacular Architecture, Global Asset, and Tourist Destination in **Contemporary China**

Lijun Zhang, associate professor, English Department

Indiana University Press, September 2024

China's Yongding County is famous for its large multistory buildings known as tulou, translated as "rammed earth building." This book introduces readers to this classic example of Chinese architecture and offers an ethnographic account of the people dwelling there.

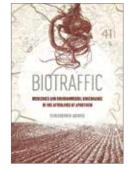


## Art during Wartime: Painting Everyday Life in the Civil War North

Vanessa Meikle Schulman, associate professor, History and Art History Department

University of Massachusetts Press, August

While the U.S. Civil War raged on, many



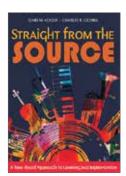
## Afterlives of Apartheid Christopher Morris, assistant professor, Sociology and Anthropology Department

**Environmental Governance in the** 

**Biotraffic: Medicines and** 

University of California Press, October 2024

Drawing from ethnographic and archival research, the author takes readers inside the contemporary Ciskei region of South Africa and examines the region's trade in Pelargonium sidoides, a plant once used as a tuberculosis treatment and now marketed as a remedy for the common cold.



## than battles or landscapes of noble sacrifice. Schulman argues that artists connected the visuals to larger concerns and uncovers the complexity of these paintings.

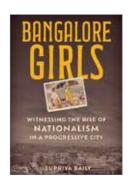
northern artists depicted everyday life rather

## Straight from the Source: A Tune-Based Approach to Learning Jazz **Improvisation**

John Kocur, assistant professor, and Charles Ciorba, associate professor, Reva and Sid **Dewberry Family School of Music** 

Kendall Hunt, September 2024

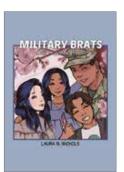
In this book, veteran teachers offer a comprehensive guide for all instrumentalists to learn how to improvise. Built around seven common tunes, each chapter contains important historical and cultural background mixed with music theory and practical exercises.

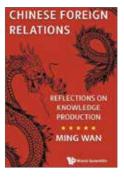


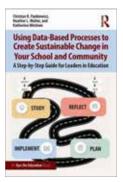
## Bangalore Girls: Witnessing the Rise of Nationalism in a Progressive City Supriya Baily, professor, School of Education Rowman & Littlefield Publishers, November 2024

Through the stories of school girls in what used to be India's most progressive city, this book reveals how the freedom women once enjoyed has been eroded by the rising tide of right-wing nationalism, misogyny, and religious fundamentalism.









## The Color of Family: History, Race, and the Politics of Ancestry

Michael O'Malley, professor, History and Art History Department

University of Chicago Press, November 2024
In the first half of the 20th century, a zealous eugenicist ran Virginia's Bureau of Vital
Statistics, misusing his position to reclassify
people he suspected of hiding their "true"
race. This is how the Irish American author
came to have "colored" ancestors. He teases
out the changes made to citizens' names
and relationships over the years, and how
families navigated what it meant to be
"white," "colored," "mixed race," and more.

# Military Brats: Well-Traveled Lives Laura N. Nichols, adjunct faculty, College of Education and Human Development

Independently published, December 2024

Told from the perspective of an experienced military child and spouse, the book, illustrated by Neda Akgun, portrays the journey of a military child using highlights from the author's life.

# Chinese Foreign Relations: Reflections on Knowledge Production Ming Wan associate dean Schar School of

Ming Wan, associate dean, Schar School of Policy and Government

World Scientific, December 2024

Chinese foreign policy has become a popular area of study for scholars around the world. This book sets out to reflect on the field itself, covering different areas of Chinese foreign policy and adopting different approaches.

## Using Data-Based Processes to Create Sustainable Change in Your School and Community

Heather L. Walter, assistant professor, and Christan R. Pankiewicz, associate professor, College of Education and Human Development, with Katherine Mitchem

Routledge, December 2024

This resource presents a data-based, process-focused framework for solving the unique problems of a school or system with vignettes and case studies, reflective questions, activity matrices, and infographics that bring key ideas to life.





## **WRITTEN BY AI**

The title of Schar School of Policy and Government Professor Alan Shark's latest book, Artificial Intelligence—A Primer for State and Local Governments: Everything You Need to Know Since Yesterday (Inde-

pendently self-published, 2024), pretty much sums up the contents. But look closely at the cover. The byline indicates the 164-page book is written by Shark, followed by "With ChatGPT, Google Gemini, Perplexity AI."

Wait. What? Did the professor use artificial intelligence to write a book about Al? In fact, he did.

"People kept asking me to recommend a central source of information, and as I looked around, I found little to recommend," says Shark, who is executive director of the Public Technology Institute and cochair of the National Academy of Public Administration's Standing Panel on Technology Leadership. "Hence, I took it upon myself to write one."

As for employing AI to help write the book, Shark is quick to point out: "It was a human–machine collaboration."

While Shark the human wrote the book, "Al helped with organizing thoughts, creating outlines, and seeking sources," he says. "The book was edited twice using Al—so it was Al checking on Al."



The book is designed to serve as a comprehensive guide for state and local government officials, employees, and policymakers attempting to understand and leverage Al's potential. It draws on Shark's years of teaching and studying technology's use for the public good.

"We delve into the core concepts of AI technology, exploring its various applications within the government sector," says Shark, who writes a column for *American City & County*, a widely read publication for local government leaders. "Practical examples highlight how AI is already utilized to address real-world challenges municipalities and state agencies face."

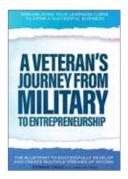
The distinctive cover art features an octopus representing AI sitting amid a stack of screens. Naturally, it's an AI rendering. "The octopus on the cover has gotten a lot of attention," he says. "It was prompted by me, and it took many renditions before arriving at the one I went with."

Shark says readers may be surprised to discover how AI is already being used in the public sector. "AI is here to stay," he says. "It will grow, and we as public stewards must stay informed—and yes—remain in control."

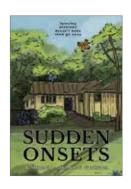
-Buzz McClain, BA '77



Recently published works by George Mason alumni







## A Veteran's Journey from Military to Entrepreneurship: The Blueprint to Become a Successful Business Owner Ronnie Davis, BA '88

In this book (Independently published, 2022), the author outlines the necessary tools and techniques that can help readers realize their entrepreneurial dreams. He emphasizes the importance of understanding why you want to become an entrepreneur, as this will define your purpose and inform your decisions.

Davis served more than 30 years in the U.S. Army. He is passionate about helping entrepreneurs and veterans realize their dreams of owning a business.

#### The Pelican Tide: A Novel

Sharon Ritchey (writing as Sharon J. Wishnow), MFA Creative Writing '05

In this debut novel, a Louisiana family and their community need to prove to each other and the world that their bond is thicker than the oil threatening their shores after disaster strikes (Lake Union Publishing, June 2024).

In addition to writing upmarket fiction with environmental themes, Ritchey writes nonfiction in the science, technology, and business categories with a passion for research, seashells, birds, and the ocean. She has been a member of the Boston Malacological Club since she was 10.

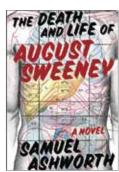
#### Sudden Onsets: A Memoir

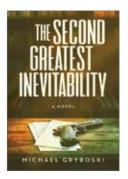
Jennifer Jackson, BA Foreign Languages (Spanish) '95

This memoir (Independently published, August 2024) focuses on the author's challenges of navigating life with aging parents who have dementia or Alzheimer's disease, especially as an only child, and how perseverance, determination, and tenacity were her only options.

Jackson has been a high school teacher for more than two decades. She enjoys travel, exercise, and spending time with her husband, two kids, and a chocolate Labrador retriever named Fred.







## 10 Little Rules When Good Jobs Go Bad: Learn, Grow and Reclaim Your Power at Work and in Life

Kathleen (Kate) Goggin, BIS '95

This book (Little Rules Publishing, September 2024) is about how each career decision shapes who we are, what we do, and how we live our lives and will help readers rewrite their career rules with a guided journaling format, reflective questions, and resource list help.

Goggin is a certified technical writer and a former national spokesperson. Her former clients include the U.S. State Department and the Federal Aviation Administration. She lives in Leesburg, Virginia.

## The Death and Life of August Sweeney: A Novel

Samuel Ashworth, MFA Creative Writing '18

In this debut novel (Santa Fe Writers Project, March 2025), two people are drawn together across the barrier of death. As Maya Zhu does an autopsy on legendary chef August Sweeney, everything that can go wrong, does, because Sweeney isn't about to let death stop him from raising hell.

A former columnist for The Rumpus, Ashworth teaches creative writing at George Washington University. A native New Yorker, he now lives with his wife and two sons in Washington, D.C.

#### The Second Greatest Inevitability: A Novel

Michael Gryboski, MA History '15

This novel (Emerald House Group Inc., March 2025) takes the reader through a twisted road of past and present. As the world dwells in darkness and violence, something hopeful comes as a thief in the night.

Gryboski has worked with The Christian Post since 2011, where he writes articles covering politics, court cases, and other notable religious events. He now resides in Richmond, Virginia.



**B** ack in 2023 on the day before move-in, Midori Galligan received a bit of advice from her dad as she embarked on her college journey. "He kind of gave the normal talk of 'You need to do new things, meet new people, and just say yes.""

In her two years on campus, Galligan has taken that guidance to incredible heights. In the process, she's discovered new passions while pursuing the degree that prompted her to come to George Mason.

ROWING ON A WHIM: A former soccer player, Galligan decided to focus on academics when she came to the university. But during an activities fair on campus, a George Mason rower encouraged her to try out for the squad. "I was like, you know what? I'm just going to try it." Despite having no prior awareness of the sport, Galligan cleared tryouts and embarked on a journey that's still going strong three years later. "It ended up being the best decision I feel like I've made so far."

**KEEP TO THE BEAT:** Galligan is also an active member of Noteworthy, George Mason's a cappella group. Like with rowing, she joined on a whim. "I decided [to try out] 30 minutes before the audition." She got in, and by her third year the group named her music director, which had her selecting the music and leading rehearsals. She has found some surprising similarities between her two passions.

"Rowing is a very rhythmic sport...in a boat of people you have to be moving together.... Constantly being on a beat has helped me pick up rowing technique."

COMPETING ON THE WORLD'S STAGE: This summer, Galligan was selected to compete with Team USA at the prestigious FISU World University Games in Germany. The World Games are second in importance to the Olympic Games and bring 10,000+ global student-athletes together across 15 sports.

BEST LAID PLANS: While Galligan, who is a member of the Honors College, seemingly left the social part of her life as a Patriot to chance, her academic path shows strong intention. "I knew I wanted to be a physical therapist," she says, "and a big part of preparing for PT school is experience." She cites the university's proximity to Washington, D.C., and its rich pool of internship opportunities as major factors in her decision to come to George Mason.

ADVICE FOR NEW PATRIOTS: In her journey of "saying yes," Galligan says she's discovered something far more important. "I think the point of going to school and having all the opportunities is just to kind of get out of your comfort zone and see what's there. You learn something about yourself and what you want...it helps you figure out who you can be."

—Priyanka Champaneri, BA '05, MFA '10



## **Bioinformatician Maps Her Own Path** to NIH Fellowship

■ I t's funny, you know, the connection between the events," says Soukaina Amniouel, MS Bioinformatics and Computational Biology '20, PhD '24. Amniouel is referring to how she completed her very first genome assembly at George Mason for a research project. She now does this same task nearly every day as part of her postdoctoral fellowship at the National Institutes of Health (NIH). It's clear, however, these connections aren't coincidence-Amniouel overcame numerous obstacles to make them happen.

Amniouel credits her mother with the push to apply to George Mason to pursue her interest in bioinformatics, since there were no strong programs in her native Morocco. Despite the worries about diving into something so new, she saw that international students were happy at George Mason and decided to take a chance on a university that rewards determination like hers. "I am grateful that I did not give up...because I learned so much and I found that it is exactly what I want to study," she says.



Amniouel's doctoral thesis focused on using biomarkers and machine learning—which is a branch of artificial intelligence—to improve the rate of efficacy for chemotherapy. While many areas of health care involve targeted therapies, that's often not the first option for cancer patients. Amniouel worked alongside Professor M. Saleet Jafri, director of the Interdisciplinary Program in Neuroscience, to develop a patented machine learning model that they hope will one day allow doctors to match a patient's genetic profile to the most effective chemotherapy. This would reduce both the physical burden and overall cost of treatment. While bioinformatics research involving AI was rare when Amniouel started her PhD, her decision to pursue it anyway meant that she was exactly the kind of forward-thinking candidate NIH wanted.

For a self-described quiet person, her excitement is palpable when she talks about her research. This enthusiasm for bioinformatics helped her step outside her comfort zone and serve as a graduate teaching assistant during her studies, which she says allowed her to hone her communication and presentation skills.

"Today I really love teaching," she says. "And this just shows how putting yourself in awkward positions can sometimes really make you grow." Amniouel still teaches a class every week on George Mason's Science and Technology Campus.

Amniouel's current NIH research supports the discovery or improvement of drug therapies for both cancer and neurodegenerative diseases, like Alzheimer's and Parkinson's. She meets with scientists every day to discuss their projects and what her data analyses mean for their work. These conversations are one reason she finds the position so fulfilling.

"You remind yourself, we're doing this for people, for patients.... And that connection—those meetings are very useful because honestly it just makes me love my field more. Because even if it's a small task, it's helpful to someone." W

-Rebecca Kobayashi



## 1970s

Marcia Campbell Kline-Libertz, BA Education; Spanish '73, wrote Living in God's Grace, published in February by Mainspring Books. The book is a daily devotional featuring Bible verses and corresponding prayers. She retired from Fairfax County Public Schools in 2013.

## 1980s

Stephanie Hardenburg,

MA Psychology '82, PhD Psychology '01, is chief executive officer of Counseling and Forensic Services, a mental health services provider. The company has 11 locations in Virginia.

Greg Nelson, MFA Creative Writing '85, is the winner of The Letter Review Prize for Poetry for his poem "The Blue Pearl." His works have appeared in Phoebe, Poet Lore, the minnesota review, Artemis, Cathexis Northwest Press, Flying South, Atlanta Review, HeartWood Literary Magazine, and Gyroscope Review.

#### Rafael Rodriguez-Mandry,

BS Economics '85, earned an associate's degree in music with a jazz emphasis in 2020 from Laney College in Oakland, California, and was inducted into Phi Theta Kappa. In 2023, he received a bachelor's degree in music with an emphasis in jazz studies, summa cum laude, from San Francisco State University. He is currently enrolled at San Francisco State University in a master's degree program in music composition and expects to graduate this year.

Carolyn Dooley Athey, BA Art '87, is an art educator in Cumberland (Rhode Island) Public Schools and a freelance graphic designer and illustrator. In 2023, she was named the Rhode Island Art Education Association Middle Level Art Educator of

Philip Hyland, MS

Computer and Electronics Engineering '87, PhD Information Technology '99, retired from Science Applications International Corporation in June 2021 after a 32-year tenure. He also retired from the U.S. Army after 21 years of active duty, including in the District of Columbia National Guard and the Army Reserve. He is director and treasurer of Assist Pregnancy Center and founded the nonprofit Youth2Trades, which sponsors scholarships for high school graduates who are entering a trade or the

## 1990s

Michael VanPatten, MBA

'90, is an artist, the founder of View Finder Arts, and an adjunct professor of business at Southern New Hampshire University. His artwork, Space Port City, was licensed for the summer 2024 exhibition Lunar Lullabies: Holiday Fun Space in the city of Colchester in Essex, England. The work is an abstract image blended from photography, artificial intelligence (AI), and digital editing.

#### Hala Gorani, BS

Economics '92, was named a Pathbreaker of Arab America by the national media organization Arab America, which promotes an accurate image of the Arab American community and the Arab world. She is a correspondent with NBC News and previously anchored Hala Gorani *Tonight*, an international news program on CNN. She has been nominated for multiple Emmy Awards and won for the categories Outstanding Live Coverage for a News Story for the revolution in Egypt and News and Documentary for Syria: Gasping for Life in Khan Sheikhoun.

Sherell Fuller, BA English '95, MEd Curriculum and Instruction '99, is assistant director for the Center for Teaching Excellence at North Carolina A&T State University in Greensboro.

Pamela Baker Koehle Wilson, BA Music '96, is the owner of Harmony Classroom, an education consulting company through which she provides professional development and mentoring to elementary school music teachers. She also teaches music at Cherry Run Elementary School in Burke, Virginia.

**Dennis Roch**, MA English '97, retired from public education after a career as a teacher, coach, and school superintendent in New Mexico. He is chief of staff

for the Republican members of the New Mexico senate.

Susan Landers, MFA Creative Writing '99, wrote her fourth book of poetry, What to Carry Into the Future, published by Roof Books in March. She is director of digital marketing and content strategies at Brooklyn College.

**Edwin W. Powell**, DA Community College

Community College
Education '99, is senior
advisor to the prime
minister of St. Kitts and
Nevis and special advisor
to the Ministry of National
Security. He advises the
prime minister on important
national security issues
and is involved in shaping
strategic policy as it relates
to international relations,
security, and diplomacy.

Gina Spivey-Brown, PhD Nursing '99, is president of Oakwood University, the first woman in the position and only the third non-clergy president in the school's 129-year history. Previously, she was dean of the College of Nursing and Allied Health Sciences at Howard University, dean for the School of Health Professions, Science, and Wellness at Washington Adventist University, and an academic in the School of Nursing at Loma Linda University.

## 2000s

Melanie McCabe. MEd Curriculum and Instruction '02, MFA '05, is a writer and educator who spent more than two decades as an English and creative writing teacher with Arlington (Virginia) Public Schools. Her debut novel, Road Longer Than Memory (Oceanview Publishing), and her fourth collection of poems, All the Signs Were There (Longleaf Press), are scheduled for publication in 2026. The book of poetry won Longleaf's annual

Joshua Weiss, PhD Conflict Analysis and Resolution '02, is president of Negotiation Works, a leadership, negotiation, and conflict resolution and training consulting company. He also is cofounder of the Global Negotiation Initiative at Harvard University, a senior fellow at the Harvard Negotiation Project, and an assistant professor and the director of the MS in leadership and negotiation program at Bay Path University in Longmeadow, Massachusetts. He wrote Getting Back to the Table: 5 Steps to Reviving Stalled Negotiations, which was published in August 2024 by Berrett-Koehler Publishers.

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## What's New with You?

We are interested in what you've been doing since you graduated. *Landed a new job? Received an award? Started a family? Have a new business?*Submit your class notes to **alumni.gmu.edu/whatsnew**. In your note, be sure to include your graduation year and degree.







Mason Now, our \$1 billion campaign, has surpassed its halfway point. We look to the Mason Nation to partner with us to continue to keep our promise to our community for the next 50 years and beyond.

Driving responsible digital innovation is just one of the big-picture challenges that George Mason is taking on and one that will touch virtually every unit of the university, as well as impact our many partnerships within the community.

This issue of *Mason Spirit* details the university's wide-ranging efforts on Al technology, including maximizing opportunities and adoption while addressing governance, ethical considerations, and risk mitigation.

In its relatively young history, George Mason is bolstered by its firm foundation while always looking to the future and imagining what might be. Our track record is one of safeguarding the interests of our community while exploring ways for our students—and future alumni!—to find their place in an ever-changing landscape.

As we prepare to welcome a new class of students, I encourage you to give some thought to how much has changed both on campus and in the world since you were a student. Although some of these students' experiences recall your own—apprehension, excitement, and uncertainty—in many ways, our students are navigating a new world, and AI will be a big part of it. How inspiring that they have chosen an institution committed to making the most of the technology for the benefit of everyone—not just our George Mason ecosystem but the local community, the country, and the world.

Although change is constant, one continuous connection is that we all chose George Mason. The link to our alma mater tethers us to a special place and a transformative time in our lives. I am hopeful that this link continues to connect you to George Mason now as an alum, in whatever way you can imagine.

Feel free to reach out to me at shine2@gmu.edu with thoughts about how to foster engagement with the alumni community and with the university and its many programs and initiatives. Together, we can build on George Mason's rich legacy and support the success of future generations.

With Patriot Pride,

Scott Hine, BS Decision Sciences '85 George Mason University Alumni Association Conn Carroll, ID '05, is the commentary editor for the Washington Examiner. He previously was a communications director in the U.S. Senate for seven years before his return to journalism. He is the author of Sex and the Citizen: How the Assault on Marriage Is Destroying Democracy, which was published in October 2024 by Bombardier Books.

Shashi Dabir, MS Telecommunications '05, is a cybersecurity project engineer at General Dynamics Information Technology. He received the Albert Nelson Marquis Lifetime Achievement Award from Marquis Who's Who in 2024. The award recognizes his achievements, leadership qualities, and successes in his field. During his career, he has supported federal government agencies, including the U.S. Department of Defense, and the intelligence community through work with Northrop Grumman, CACI International, Booz Allen

Hamilton, Lockheed Martin, and BAE Systems.

Michelle Lammers, MA International Commerce and Policy '05, was named one of Colorado's 50 Top Women to Watch by Women We Admire, a nonprofit providing news about women executives in major U.S. industries. She is vice president of communications at Nightwing, an intelligence and cybersecurity firm. She was also named among the Top MarCom Execs to Watch in 2024 by WashingtonExec magazine.

Jean-Guy Afrika, MA International Commerce and Policy '06, is the chief executive officer of the Rwanda Development Board, where he focuses on advancing the country's growth as a hub for investment, trade, and development. Previously, he led the Regional Integration Coordination Office at the African Development Bank Group and advised senior management on the design, structuring, and financing of large-scale infrastructure projects. Afrika also held leadership roles with the East African Community and the Rwanda Investment and Export Promotion Agency.

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Riley Moore (left) is the third George Mason alumnus to be elected to Congress. David Jolly, JD '01, was the first, representing Florida and serving from 2014 to 2017. Following Jolly was Jim Hagedorn, BA Government and Politics '93, who represented Minnesota from 2019 to his death in February 2022.

## A New Voice in Congress

The halls of Congress are filled with career politicians, lawyers, and policy experts, but U.S. Representative **Riley Moore**, BA Government and International Politics '05, the new congressman representing the 2nd district of West Virginia, brings something different to the table: experience with a welding torch and a deep-seated commitment to public service that he discovered as a student at George Mason University.

Moore's journey, from a college job building torpedo clamps in a machine shop to serving as an elected official on Capitol Hill, is an inspiring one.

Attending trade school and working as a welder helped shape Moore's understanding of skilled labor and industry. What drew him to George Mason?

"I wanted to do something different," he recalls. "I wanted to be close to the Washington, D.C. area."

Then came 9/11.

"I was at George Mason that day," he says. "I didn't think a lot of Americans really understood how this happened, why this happened." Soon Moore found himself immersed in all the details surrounding the tragic event and changed his major to government and international politics.

Public service runs in Moore's blood. His grandfather Arch A. Moore Jr. was the governor of West Virginia, though Moore was too young at the time to fully grasp the significance of his grandfather's position. "He stopped being governor when I was 8 years old," he says. "To me, he was just my grandpa in a big house." His aunt Shelly Moore Capito is the senior U.S. Senator from West Virginia.

But his family influence wasn't solely political, as his other relatives were union laborers, a connection that led him to welding, a trade he continued as a student at George Mason.

"We were building torpedo clamps and all kinds of different things," Moore says of his college job, adding that that experience helped him bring a different perspective to the legislative process.

After graduating from George Mason, Moore interned on Capitol Hill while bartending at night, eventually securing a job in public service. He worked on the House Foreign Affairs Committee, spent time in the defense industry, and, despite never expecting to run for office, took the plunge.

"I ran for the [West Virginia] House of Delegates and won by 100 votes," he says. "Then I ran for state treasurer and won that. And now I'm here."

As a newly minted congressman, Moore acknowledges there is hard work ahead but remains optimistic. "So far, I'm loving it."

-Buzz McClain, BA '77



Are you an alum who owns a business?

List it in our alumniowned business directory.

Go to go.gmu.edu/ alumnibiz to find out more.



Matthew Wilson, BA Psychology '08, MEd Special Education '14, wrote the second book in his series, Let's Go, Buffalo!, which was published under the pen name Matthew Ryan in November 2024 by Big Six Safari. The children's book incorporates mental health coping skills as it follows Buffalo, who is navigating a big problem. A board-certified and licensed behavior analyst. Wilson is a senior work wellness coach at Amazon.

Roxie Alsruhe, BS Finance, Marketing, Information Technology '09, is founder and chief executive officer of HoopDee, an app that manages and tracks stored breast milk for breastfeeding moms, their spouses, and the baby's caregivers. She

and Kathryn "Katy" Woods, BSN '09, were married on February 22, 2022, and they have a 19-month-old son.

Michael Davis, BA

Integrative Studies '09, is the founder of Tiny Cup, a home-based coffee roasting company. In 2024, he collaborated with George Mason University to launch Brave & Bold: The Patriot Roast, available at Express Market in the Johnson Center, One Stop in Blue Ridge Hall, or online at tinycup.coffee.

Gretchen Anderson, BSW '10, an integrative health coach and certified mineral balancing practitioner, is the owner of Journeys Ahead Health Coaching. She uses

hair tissue mineral analysis to design wellness programs that include nutrition, detoxing, and lifestyle changes.

Beka Kruse Wueste, MA Art History '11, published her debut novel, The Unsent Letters of Lucy Prior, in March through Fox Island Press. She also exhibited a collection of paintings and drawings in the Members Gallery at the Fredericksburg Center for the Creative Arts. She is director of brand and marketing at Integrated Data Services.

Tajia Diggs, MSW '12, is part of a team revolutionizing vegan food in the Mesa, Arizona, area. Her popular family-owned Hot Sauce and Pepper food truck has been recognized in local media for their popular food items.

Phillip Gilmore, PhD Psychology '13, is principal data scientist with AT&T Mass Markets where he deploys generative AI technologies to the company's more than 100 million subscribers. He also co-founded the internally branded platform Ask Transcripts, which uses innovative technologies to understand customer insights from more than 200,000 daily customer service interactions.

Trish Joseph Taylor, MS

Cyber Security Engineering '15, is a security engineer with Abbott. She recently earned Global Cybersecurity Training Initiative certification through SANS Technology Institute.

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#### GEORGE MASON UNIVERSITY ALUMNI ASSOCIATION BOARD OF DIRECTORS 2025-26

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Vacant, President, Scalia Law School Alumni Chapter

Erika Laos, BA '01, President, Schar School of Policy and Government Alumni Chapter

Vacant, President, Veterans Alumni Chapter

If you would like to become involved in the Alumni Association, please contact the Office of Alumni Relations at alumni@gmu.edu.





From left,
Kaiden Al cofounder
and COO Ali "AJ" Aldjaei,
founding engineer
Tiba Ramadhan, BS
Computer Science '22,
and cofounder and
CEO Ali Aldubaisi.

## From Pre-Med to AI Entrepreneur

ntrepreneur **Ali Aldubaisi**, BS Neuroscience '21, started his studies at George Mason with the intention of going to medical school. However, distance learning during the pandemic led him to think outside of the box and start his first company, vRealm, an online tutoring platform.

After a few years working on the project, he cofounded Kaiden AI with his vRealm partner, Ali "AJ" Aldjaei. "When we first started, we were focused on the higher education market," Aldubaisi says. "We initially built the AI platform for grading and evaluation."

After gaining limited traction in higher education, Aldubaisi and his team built a small-scale simulation demo to test a new direction. Among the first to see it was executive coach **Steve Gladis**, MA English '84, PhD Education '95, a senior scholar at George Mason's Center for the Advancement of Well-Being and a former FBI special agent. He immediately recognized its potential for law enforcement training and encouraged Aldubaisi to explore that path.

Kaiden AI delivers immersive, voice-driven simulations for law enforcement officers to prepare for real-world scenarios while building skills and offering real-time feedback.

"We put the [minimum viable product] in front of police chiefs and academy directors, and their reaction was completely different from our earlier demos," says Aldubaisi. "That's when we knew we had to double down."

Aldubaisi's persistence paid off, and now he and his team are partnering with law enforcement agencies and regional academies to implement their simulation platform, including the Northern Virginia Criminal Justice Academy, which is currently piloting the technology. Recently, a pre-seed funding round led by Focal Ventures awarded \$1 million to Kaiden Al.

Even though his current work isn't directly related to neuroscience, Aldubaisi recognizes the value of his degree. "A lot of the concepts [in entrepreneurship and neuroscience] mirror each other," he says. "What goes into marketing, how to understand people, how people learn."

Developing hypotheses and constantly experimenting has helped Aldubaisi and his team refine and optimize Kaiden Al, from its initial concept in January 2024 to its current phase today.

In 2024, Aldubaisi led the keynote discussion at George Mason's Patriot Pitch Competition. The event, organized by the Costello College of Business's Center for Innovation and Entrepreneurship, supports ideas and early-stage business ventures from George Mason students and recent alumni. Having gone through that process, Aldubaisi offers crucial advice to aspiring entrepreneurs that reflects his scientific background.

"Having the courage to focus on that one thing that you're trying to prove is probably the biggest thing," he says. "Second thing is always look at your idea as an experiment, and the goal is to prove or disprove [the idea] as soon as possible."

-Greg Johnson, BA '13



Rebecca Wahls, BA Theater '15, made her directorial debut on the film Him. which was screened this spring in the Johnson Center Cinema on the Fairfax Campus. The film focuses on the final five contestants of a reality dating show who discover that their potential "soulmate" isn't who he seems to be. She received support from the Young Alumni Commissioning Project for the film. She is an artist-in-residence at Duke University.

#### Maria Barrios Rottmann,

BS Economics '16, published a career-based blog post and YouTube video titled "Let Your Talent Shine" for Life at Deloitte US. She also was a featured interviewee in Deloitte's Hire2Train campaign in which she shared personal and professional experiences and insights from the Neurodiversity@Deloitte apprenticeship program.

Richard Groover, PhD Environmental Science and Policy '17, is an affiliated professor at George Mason and the author of Citizen Boards: The Good and the Bad. The book details the ins and outs of serving on a board and includes insight from more than 30 people with 500 years of cumulative board service. It was published in December 2024 by Parker Publishers.

**Robert Rubama**, BFA Dance '18, was on campus

for a guest residency this spring and worked with School of Dance students to help stage choreographer Yue Yin's Through the Fracture of Light, which the students performed at the Dance Gala Concert. Rubama performed a Yin piece as a George Mason student and later toured with the Yue Yin Dance Company. As an independent choreographer, Rubama's work has been performed by numerous companies including Company E Dance, Spark Movement Collective, and the Cleveland Dance Project.

Claudia Morcelo, BA Communication '19, published the Spanishlanguage book *Mamá a los* 16 (Mom at 16) in March 2024. The book details her experience as a teen mom overcoming obstacles to earn a degree. An English version is forthcoming. She is a management analyst with Fairfax County (Virginia) government and works as a freelance reporter.

## 2020s

Rhyan Elliott, BA Film and Video Studies '20, served as a production supervisor for Oscar-winning film *Anora*, where she worked closely with the film's line producer managing the finances and budget of the film. She also attended the film's world premiere at the Cannes Film Festival in France.

Jonathan Galaviz, LLM '24, is chief economist at Clark Hill Economics and senior director, federal lobbying at Clark Hill Public Strategies. He was previously the managing director of Galaviz & Co. and was a senior advisor at the U.S. Department of State during the first Trump administration.

Sami Saghir, BA Tourism and Events Management '24, is working as a guest experience supervisor and touring with Cirque du Soleil. He started with the company working as a local hire on the *KURIOS* show and received a full-time job offer after the experience. Saghir is responsible for ensuring that every guest has a memorable and enjoyable experience.

## **Obituaries**

#### **ALUMNI AND STUDENTS**

#### Larry W. Avery,

BA Business and Public Administration '71, MA Psychology '83, d. February 9, 2025

**Howard J. Kohl III**, BS Business Administration '73, d. January 18, 2025

**Howard D. James**, BS Business Administration '74, d. January 6, 2024

**Deborah M. Anderson Smith**, BA History '74, d. March 11, 2025

**Gary S. Zell**, BS Business Administration '74, d. February 7, 2025

**Lelia R. Clark**, BA History '75, d. January 29, 2025

**David B. McQuain**, BS Business Administration '75, d. February 17, 2025 **Richard L. Wallace**, BS Business Administration '75, d. March 12, 2025

Nicholas A. Balland, JD '77, d. November 26, 2024

**Debby C. Loucks**, MEd Counseling and Development '77, d. November 23, 2024

**Thomas L. O'Neill**, JD '78, d. January 2, 2025

**Dolores F. Windt**, MAT History '78, d. January 31, 2025

**Kathleen J. Marks**, BS Business Administration '79, d. January 23, 2025

**Teresa McHugh**, BSN '79, d. February 14, 2025

**Joseph H. Stormer**, JD '80, d. December 22, 2024

**Ronald E. Triggs**, JD '80, d. March 11, 2025

Richard F. Wessel Jr., BS Biology '81, MS '85, d. January 27, 2025

**John J. Diamond**, BS Business Administration '82, d. January 29, 2025

**Patricia A. Frost**, MEd Curriculum and Instruction '82, d. December 8, 2024

**Georgianna Meeker**, BSN '82, d. February 23, 2025

**Lois F. Runaldue**, BS Social Work '83, d. February 5, 2025

Nancy E. Matthews, BS Accounting '84, d. February 11, 2025

**Timothy S. Hausfeld**, BS Electronics Engineering '85, d. December 27, 2024

**Joseph J. Haydon**, MBA '85, d. January 14, 2025

**Jean D. Hoadley**, BM '85, d. January 11, 2025

**Kathleen F. Meredith**, MS Conflict Management and Resolution '86, d. January 2, 2025

**Gary L. Bains**, BS Electrical Engineering '87, d. December 8, 2024

**Stephen B. Maas**, BS Finance '87, d. February 27, 2025

Mary R. Rolston, BA English '87, d. February 7, 2025

Phillip Ashley Sharman, MS Operations Research and Management Science '87, MFA Creative Writing '98, d. December 16, 2024 **Cheryl A. Beal**, BS Decision Science '88, d. December 3, 2024

**Kenneth S. Bissell**, MA Music '88, d. January 7, 2025

**Kristen A. Colston**, BA English '88, d. January 2, 2025

Molly Ryan Negus, BS Finance '89, d. November 17, 2024

Christine A. Langford, BA English '90, d. November 22, 2024

**Leslie J. Leinaweaver**, MS Information Systems '90, d. December 3, 2024

Ed A. Kelly,

MS Information Systems '91, d. December 11, 2024



Donna Marie Kucia,

BS Decision Sciences '91, MS Information Systems '94, MBA '95, d. January 23, 2025

Anne M. McAloon,

MA Economics '91, d. March 3, 2025

Michaeleen McGettigan, BA English '91,

d. January 16, 2025

**Linda M. Swacina**, JD '91, d. February 9, 2025

**Simon Steil**, MAIS '92, d. December 27, 2024

**Ruth E. Garretson**, MPA '93, d. December 7, 2024

J. Edward Hayes,

MS Computer Science '93, d. February 17, 2025

**Ellen L. Quaintance**, BA Government and Politics '93, d. November 28, 2024

Jack A. Underhill, PhD Public Policy '94, d. March 1, 2025 Kristen A. Hopfenspirger,

BA Speech Communication '95, d. February 16, 2025

**John N. Haskell**, MA International Transactions '96, d. November 13, 2024

Adel E. Persekian,

MS Software Systems Engineering '96, d. February 24, 2025

**Joel E. Traylor Jr.**, JD '97, d. January 7, 2025

Mary J. Madden, MEd Special Education '98, d. February 17, 2025

**Lora L. Martin**, BIS '98, d. January 11, 2025

**Phillip M. Vaughan**, BIS '98, d. January 5, 2025

**Mark D. Hamill**, MS Software Systems Engineering '99, d. January 5, 2025

Frances B. Mueller,

BS Urban Systems Engineering '00, d. January 17, 2025 **Opal A. Wolford**, MSN '00, d. January 17, 2025

**Patricia A. Bullock**, BS Administration of Justice '01, d. December 20, 2024

Juliette C. Mersiowsky, MEd Curriculum and Instruction '01, d. February 12, 2025

Achal P. Kaur,

BS Economics '02, d. March 5, 2025

Annissa B. Cosentino,

BA Communication '03, d. January 7, 2025

**Michael F. Woodring**, MEd Curriculum and Instruction '03, d. January 5, 2025

Constance Barrett,

MA English '05, d. January 3, 2025

**Khoa D. Lam**, BIS '05, d. February 16, 2025

Matthew K. Rinker, MM '05, d. December 25, 2024

Stephen V. Stephenson,

PhD Information Technology '06, d. February 20, 2025

**Ty T. Lovitt**, BA Government and International Politics '07, d. January 22, 2025

Morgan E. Schmidt Parker,

BS Tourism and Events Management '11, d. January 30, 2025

Joseph M. Grimberg,

BA Communication '12, d. January 31, 2025

Thomas A. Potts,

MA Foreign Languages '12, d. December 22, 2024

Derek Thieme,

MA Economics '13, d. November 27, 2024

James W. Dean,

MA History '14, d. December 31, 2024

Radleigh J. Smith Jr.,

BS Chemistry '14, BS Biology '14, d. December 15, 2024 Nicholas B. Damon,

BS Psychology '22, d. January 17, 2025

#### FORMER FACULTY AND STAFF

Anne Scrivener Agee, d. December 29, 2024

William D. Clark,

d. November 20, 2024 **Edward L. Delaney**,

d. January 6, 2025

**Edward C. Dobson**, d. January 17, 2025

Winifred G. Keaney, d. November 25, 2024

Raymond G. LePage, d. February 6, 2025

**Phyllis Malkiewicz**, d. December 11, 2024

**Stephen M. Maltman**, d. January 15, 2025

#### FACULTY, STAFF, AND FRIENDS

**Edward Fraedrich**, BM '83, adjunct faculty in the Reva and Sid Dewberry Family School of Music, died on April 28, 2025, of a heart attack. He was 67. Fraedrich first picked up the saxophone at age 11, and it became his lifelong passion and vocation. Professionally, he performed as a saxophone soloist with many distinguished ensembles, including the National Symphony Orchestra and the Fairfax Symphony Orchestra. He taught hundreds of students across five decades. In addition to giving private lessons and leading saxophone sectionals at local schools, he was an adjunct saxophone professor and had taught at George Mason since 2011. He is survived by his wife, his three children, and two grandchildren.

Carolyn Marsh, retired men's basketball administrator, passed away on May 15, 2025. She joined George Mason Athletics in 1975 as a sports information assistant before becoming executive assistant for the men's basketball program and its head coaches, where she worked for 46 years. Marsh and her husband, Jay, who served as an administrator in Intercollegiate Athletics for 45 years, left an indelible mark on the lives of hundreds of George Mason student-athletes over their decades of service. In addition to funding an endowed scholarship, the Marshes provided a signature gift of \$50,000 to renovate the George Mason men's and women's basketball locker rooms and funded the creation of the men's basketball film room, known as the Carolyn Marsh Film Room. To honor Carolyn Marsh's passion and pride for Patriot basketball, donations can be mailed to the George Mason University Foundation, 4400 University Drive, MS 1A3, Fairfax, VA 22030. Please make checks payable to GMU Foundation Inc. and write "Memorial Donation/ Carolyn Marsh" in the memo line.

William Reeder, the founding dean of the College of Visual and Performing Arts, died April 12, 2025, after a battle with pancreatic cancer. He was 80. Reeder joined George Mason in 2001 to lead the newly formed college. He served as dean until May 2015 and continued to teach in the Arts Management Program, one of three academic programs launched under his leadership. Prior to joining George Mason, he served as vice president and general manager of the Washington Performing Arts Society, executive director of the Levine School of Music in Washington, D.C., president of the Saint Louis Conservatory of Music, and executive director of Opera Music Theatre International. For eight years, Reeder was a leading operatic tenor in the Zurich Opera Company. As a professional singer, he performed more than 40 leading tenor roles in 15 major opera houses throughout Europe. He is survived by his wife, two children, and five grandchildren.

Maurice "Morrie" Scherrens, former George Mason University senior vice president, died on April 6, 2025, at the age of 76. Before being named president of Newberry College in South Carolina in 2012, Scherrens spent more than 30 years at George Mason, where he played a central role in the university's rise to national prominence. He also taught ethics and graduate-level finance courses and mentored countless students. In recognition of his leadership, he was named CFO of the Year for large nonprofit organizations in 2009 by Virginia Business magazine. He believed deeply in the role of athletics in building character and community and served as an NCAA football and basketball official. Scherrens shared his personal and professional journey with his wife, Sandy Scherrens, who also served the George Mason community as vice president for University Life. Together, they were inducted into the Mason Recreation Hall of Fame in 2024. He is survived by his wife, their four children, and five grandchildren.





READ MORE ABOUT THE ROBOPATRIOTS.



WATCH THEM IN COMPETITION.



# **RoboCup in Mexico City, 2012**

In the summer of 2012, the RoboPatriots, led by then-PhD student **Keith Sullivan**, MS Computer Science '05, PhD '15, traveled to Mexico City, Mexico, as one of two U.S. teams (the other was from Virginia Tech) to compete in the weeklong 2012 RoboCup. The RoboPatriots competed in the kid-size humanoid league with robots measuring 12 to 24 inches tall.

The robots played—or tried to play—soccer. For the competition, the robots had to be autonomous to compete. They would get a signal from the referee to "kick off," and the game began. "It's like watching five-year-olds play soccer," said Sullivan at the time of his robotic team. "All the adults are yelling, 'Run! Kick!' and the robots do whatever they want, just like five-year-olds."

All the robots on the team were named for characters in the 1980s movie *Short Circuit*. "When we put the first one together, we realized he looked like Johnny 5 [the movie robot] with feet," Sullivan said. In the photo above, the robot Newton is demonstrating his soccer skills at Engineers Day 2012.



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**TURTLE POWER**—In early March, the retention pond next to the Potomac Science Center needed to be emptied to make changes to the drainage system. George Mason volunteers like environmental science major Rylee Ledoux helped relocate 60 turtles from the pond including painted turtles, red eared sliders, cooters, and a large snapping turtle. Read about the turtles at go.gmu.edu/turtlerescue.

