



THE WEEKLY

Faculty Matters Workshop Series

The Office of Faculty Affairs and Development and Research Development are co-sponsoring the Faculty Matters Workshop Series for fall 2022, which is a workshop series designed to address key issues central to faculty development and success. The first session in the series, "How to Align Your Time and Priorities," focuses on how to make the best use of your time by intentionally aligning your time with your goals. Participants will have the chance to win a free book [Atomic Habits](#) by James Clear. The workshop is Wednesday, September 7, 1:30-3 p.m. on Zoom. [Registration is required.](#)

UPCOMING EVENTS

Bring Down Counterfeiting 2022: Policy Hackathon

BRING DOWN COUNTERFEITING 2022: Policy Hackathon

PRESENTED BY

George Mason University's [Terrorism, Transnational Crime and Corruption Center \(TraCCC\)](#) is pleased to partner with Amazon to co-host the 2022 Bring Down Counterfeiting Public Policy Hackathon August 5- November 5, 2022, which is now accepting registrants. Tickets are finite, and registration closes on October 7, 2022, so [register now!](#)

NSF 2022 Waterman Lectures

Jessica E. Tierney Daniel B. Larremore Lara A. Thompson

The Alan T. Waterman Award

Join the U.S. National Science Foundation for a three-part lecture series featuring the laureates of the 2022 Alan T. Waterman Award, the nation's highest honor for early-career scientists and engineers.

Falls and Agle – The Need for Biomedical Solutions to a Global Problem
Lara Thompson, University of the District of Columbia
September 12, 2022, 1-2 p.m. [Register here.](#)

Trends in U.S. Faculty Hiring and Retention from Ten Years of Data: A Study of Prestige, Diversity and Inequality
Daniel Larremore, University of Colorado
September 28, 2022, 1-2 p.m. [Register here.](#)

Past Climates Inform Our Future
Jessica Tierney, University of Arizona
October 11, 2022, 1-2 p.m. [Register here.](#)

Defense TechConnect Innovation Summit and Expo

SEPTEMBER 27-29, 2022 | WASHINGTON, DC

DEFENSE TECHCONNECT INNOVATION SUMMIT & EXPO

COLOCATED WITH SBIR/STTR FALL INNOVATION CONFERENCE SMART CITIES CONNECT FALL CONFERENCE & EXPO

Connect with \$4 billion+ in funding opportunities with SBIR Offices and Agencies at the Defense TechConnect Innovation Summit and Expo. [Learn more.](#)

NVIDIA GTC Deep Learning Institute Workshops

The Developer Conference for the Era of AI and the Metaverse

September 19-22, 2022

Register Free

NVIDIA's fall [GTC conference](#) is taking place September 19-22. A few sessions that might appeal to students, researchers and educators include:

For students:

- [5 Paths to a Career in AI \[SE41225\]](#)
- [How to be a Deep Learning Engineer \[SE41276\]](#)

For educators and researchers:

- [Future of AI: Fireside Chat with Turing Award Winners \[A41191\]](#)
- [The Journey from Academics to Entrepreneurship \[A41192\]](#)

[Louis Stewart](#) still has access to some complimentary passes to the full-day workshops (5 for each). If you are interested in a pass simply look at the list of classes below and reply to him at lois@nvidia.com with class, date, and time. Once he sends you a code, it is recommended that you [register](#) and secure your seat. These courses will be issued on a first-come, first-served basis, and he will put you on a waitlist should he run out of a particular course.

Monday September 19, 2022, 6 a.m. – 2 p.m. PST

- **Waitlist** - Fundamentals of Deep Learning
- 4 - Building AI-Based Cybersecurity Pipelines
- 4 - Fundamentals of Accelerated Computing with CUDA C++
- 2 - Building Transformer-Based Natural Language Processing Applications

Monday September 19, 2022, 9 a.m. – 5 p.m. PST

- **Waitlist** - Applications of AI for Anomaly Detection
- 5 - Scaling CUDA C++ Applications to Multiple Nodes

Monday September 19, 2022 9 a.m. – 5 p.m. CET

- 3 - Fundamentals of Deep Learning
- 4 - Building Transformer-Based Natural Language Processing Applications
- 4 - Computer Vision for Industrial Inspection
- 3 - Building Conversational AI Applications
- 5 - Building AI-Based Cybersecurity Pipelines
- 3 - Model Parallelism: Building and Deploying Large Neural Networks

Pitch and Pilot: Fairfax County Innovation Challenge

Carbon Neutral Pitch and Pilot

REGISTER TO COMPETE

Competition On: October 19, 1-3:30pm

Smart City Works Innovation Hub, Fairfax County Department of Economic Initiatives (DEI), and Fairfax County Office of Environmental and Energy Coordination (OEEC) in partnership with George Mason University's Office of Sustainability and Institute for Sustainable Earth, announce the launch of the Pitch and Pilot: Fairfax County Innovation Challenge.

The goal of the challenge is to find innovative solutions that improve energy efficiency, increase the use of renewable electricity, and accelerate the use of electric vehicles to shift from a carbon-based economy to a carbon-neutral community. The deadline for accepting applications is October 3, 2022, at 5 p.m. [Learn more.](#)

Anti-Racism and Inclusive Excellence Conference: Vision and Action for a New Era

SAVE THE DATE

[George Mason University's Anti-Racism and Inclusive Excellence Initiative](#) is proud to host this first-ever conference featuring panels, workshops, and conversative groups with researchers and changemakers from across the country.

October 24, 2022, 8 a.m. – 6:30 p.m.
Mason Square, Arlington, Virginia

2023 American Society for Engineering Education Southeastern Section Conference

ASEE Southeastern Section Conference

March 12-14, 2023
College of Engineering and Computing
George Mason University
Fairfax, VA

The 2023 American Society for Engineering Education (ASEE) Southeastern Section Conference will be hosted at Mason March 12-14, 2023. The conference is open to everyone interested in improving the engineering education and technology experience. More information is [here](#).

STUDENT OPPORTUNITIES

Seeking Computer Science Graduate Students for the Praxis Workshop

INTERESTED IN JOINING A PROJECT ON ASSISTING COMPUTER SCIENCE (CS) TEACHER PREPARATION?

We are seeking graduate students who are passionate about teaching computer science to help new and experienced teachers to take the Praxis exam. The workshops will be offered during the fall 2022 semester. We are looking for assisting teachers in the preparation for the Praxis Computer Science 5652 exam. These workshops are designed to help teachers prepare for the CS exam by working in the evening. We are looking for students who are interested in teaching computer science and working in the evening. If you are interested in sharing your knowledge with others and committed to helping them succeed, please to focus the focus of computer science education and have a desire to work with a group of people who are excited to learn from you.

Interested applicants must be able to commit 5 hours per week on a volunteer basis and have a laptop.

Requirements:

- Graduate student in good standing in a CS-related field
- Passion for teaching computer science
- Some experience teaching computer science (e.g., assisted running CS509, or other CS courses)

Ready to be a teacher?

Application deadline: September 5, 2022

To apply, please send a resume, a short statement of interest, recommendation letter, and a short instructional video (5 min) that explains a computer science concept (e.g., variables, conditionals, loops, Big O notation, recursion) before September 5. You are free to choose any language (e.g., pseudocode, Java, Python) to explain the concept.

If you are interested in becoming a part of our team and helping teachers successfully prepare for the Praxis Computer Science 5652 examination, please contact Dr. Erdogan Kaya at ekaya@gmu.edu with the requested documents.

Meta Research PhD Fellowship

The Meta Research PhD Fellowship program is designed to support promising doctoral students who are engaged in innovative research related to computer science and engineering at an accredited university.

Applications are open to all full-time PhD students currently involved in ongoing research who are enrolled in an accredited university in any country. We encourage all people of diverse backgrounds and experiences to apply. Applications are evaluated based on the strength of the student's research statement, publication record, and recommendation letters.

The fellowship award includes:

- Tuition and fees paid for the academic year (up to two years costs)
- A \$42,000 annual stipend to cover living and conference travel expenses
- Access to the annual Fellowship Summit
- Various opportunities to engage with Meta researchers

More information is [here](#).

Deadline: **September 20, 2022**

Google PhD Fellowship Program

The Google PhD Fellowship Program was created to recognize outstanding graduate students doing exceptional and innovative research in areas relevant to computer science and related fields. The fellowships support promising PhD candidates of all backgrounds who seek to influence the future of technology. Google's mission is to foster inclusive research communities and encourages people of diverse backgrounds to apply.

PhD students must be nominated by their university. Applications should be submitted by an official representative of the university during the application window.

More information is [here](#).

Deadline: **End of September 2022**

CCI OPPORTUNITIES

CCI Call for Proposals: Securing Interactions between Humans and Machines

WORLD CLASS CYBERSECURITY RESEARCH

LEARN MORE

The Commonwealth Cyber Initiative announces their first CFP dedicated to securing the interactions between humans and machines. Recent innovation in artificial intelligence, cyber physical systems, and communications are leading to a world in which humans and autonomous machines increasingly interact. CCI views cybersecurity as intrinsically cross-disciplinary and devises solutions that lead to secure, resilient, and harmonious interactions between people and robots, drones, autonomous vehicles, and other cyber physical systems. [Learn more.](#)

CCI NoVa Node Cybersecurity Undergraduate Internship

Under supervisor direction and mentoring, the selected intern will have the opportunity to process (fuse and correlate) data from multiple open source or other provided databases; develop Change Detection Algorithms to detect abnormalities in an environment; detect small and/or incremental change(s) otherwise difficult to detect with traditional algorithms, given the slight degree of change(s); over prolonged periods of time; predict and/or forecast disturbances – leverage change detection algorithms to forecast possible environmental disturbances; data validation using alternate sources; gap analysis – identify information ambiguities and/or gaps to ensure reliability/validity of data; ambiguity resolution – leverage historical data to reduce ambiguities in current data; and utilize these prediction algorithms to forecast potential threats to the environmental (natural, political, economic, military, social).

To apply, please submit a resume and unofficial transcript directly to Dr. Sherry Crissman at sherry.crissman@gmu-rye.org. Make sure to mention "CCI Student Internship - Application" as the subject of your email.

More information is available [here](#).

Questions? Contact Jordan Mason at jmason29@gmu.edu.

VARIOUS OPPORTUNITIES

US Army Automotive Research Center Call for White Papers

A few important updates: Per the Army, there are two ways to dramatically improve your odds of winning support for your proposal.

- Consider proposing a summer research internship to work in the laboratories at the Army's Ground Vehicle Systems Center in Warren, MI (near Detroit). What better way to learn the mission requirements and do impactful research than through a hands-on experience? The Army is interested in hosting your students or you. This opportunity is limited to US citizens and there is stipend for those with a clearance or willingness to obtain a clearance. Summer housing expenses and a per diem are eligible expenses to include in your proposal.
- Collaboration with faculty at other ARC partner universities is encouraged.

More information is [here](#). On August 12, the ARC held a webinar on the call for white papers. View the recording [here](#).

For tracking purposes, please let Mike Bunting at mibunting@gmu.edu know if you are interested in the opportunity.

Deadline: **September 2, 2022 at 5 p.m.** (Expect Feedback September 28.)

Artificial Intelligence for Critical Mineral Assessment Competition

The United States depends on a variety of raw, non-fuel materials dubbed "critical minerals" to manufacture products considered essential to national security. These products can range from rare earth minerals in electric motors and generators, to the carbon fiber used for airplanes. Increasing demand, coupled with limited domestic supply and increasing reliance on foreign companies to import these critical minerals, poses significant risks to the U.S. supply chain. DARPA has partnered with the U.S. Geological Survey (USGS) to explore the potential for machine learning and artificial intelligence tools and techniques to accelerate critical mineral assessments. The goal is to significantly speed up the assessment of the nation's critical mineral resources by automating key steps in the process.

Competition registration for the first challenge on map georeferencing opened **August 15**; registration for the second challenge on map feature extraction opened **August 29**. For each of the two challenges, DARPA will award \$10,000 for the first prize, \$3,000 for the second prize, and \$1,000 for the third prize in October 2022.

More information is [here](#).

Call for Applications: Azure Accelerator Program for Research

Do you work on a project related to machine learning, deep learning, or image processing and analysis? Are you interested in harnessing the power of cloud computing for your research? Internet2 CLASS and Microsoft Azure are collaborating on an exciting opportunity: the Azure Accelerator Program for Research!

This 10-week immersive, cohort-based program will provide the opportunity for the research and education community that Internet2 serves to explore how cloud computing can accelerate your research, leverage scientific array of data science tools and services that Azure provides, and ultimately arrive at a better and faster scientific results!

More information is available on the [blog post](#). See the [Call for Applications](#) or jump straight ahead and [submit an application](#). Send along any questions to class@internet2.edu.

Deadline: **September 10, 2022**

FUNDING OPPORTUNITIES

[Office of Surface Mining - Science and Technology Projects Related to Coal Mining and Reclamation- Applied Science Projects](#)

Deadline: September 20, 2022

[National Institute on Aging - Transformative Artificial Intelligence and Machine Learning Based Strategies to Identify Determinants of Exceptional Health and Life Span](#)

Letter of Intent Due: September 21, 2022

Proposal Due: October 22, 2022

[American Association for Artificial Intelligence - Feigenbaum Prize](#)

Deadline: September 23, 2022

[National Institutes of Health - Point-of-Care Technologies Research Network- Technology Research and Development Centers](#)

Deadline: September 27, 2022

[National Science Foundation - Division of Chemistry- Disciplinary Research Programs \(CHE-DRP\)](#)

Deadlines: September 30, 2022, and October 31, 2022, depending on program

[Alzheimer's Drug Discovery Foundation - Neuroimaging and CSF Biomarker Development Program](#)

Deadline for Letter of Intent/Pre-Application: September 30, 2022

[Office of Naval Research - FY 2023 Vinnervar Bush Faculty Fellowship Program](#)

Questions? Contact Mike Bunting at mibunting@gmu.edu.

Deadline for White Paper Inquiries and Questions: October 14, 2022

Deadline for White Paper Submission: October 28, 2022, 11:59 p.m.

Deadline for Full Proposal Inquiries and Questions: March 10, 2023

Deadline for Full Proposals: March 24, 2023, 11:59 p.m.

[National Science Foundation - Dear Colleague Letter- Design for Sustainability in Computing](#)

IDIA AFFILIATION

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There is no financial burden to you or your departments for affiliation with the institute. Participation in IDIA does not prevent its members from being associated with other university centers. If you are not already affiliated, we encourage you to submit your profile [here](#).

SHARE WITH US

We are eager to hear from you! As we work with your colleges to compile updates on digital innovation-related research activities at Mason, we would love to hear about your research activities, awards, and recent publications. Please share any successes, concerns, or ideas with us at idia@gmu.edu

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