Dear Colleagues,

We are so excited for the new faculty who have joined Mason. We are holding a meet and greet on September 21 to welcome new faculty members. Come join us to learn about what Institute for Digital InnovAtion (IDIA) offers and how you can connect to its research infrastructure.

RSVP here.

Deadline: September 15, 2023 at 5:00 PM EST
Is Generative AI a Threat to Cybersecurity? - Tech Duels

Technology moves fast! If you’re a developer, engineer, architect or technical leader, you’re constantly confronting a number of decisions and choices. Or, maybe you’re just really passionate about a particular technology. What do you do? Tech Duels will put this to debate. Skilled and opinionated developers will debate on technical topics in a variety of formats, from individuals facing off one on one to teams battling it out. All this while competing for prizes and recognition as the winning debaters.

Event date: September 14 at 6:00 PM EST.

Register here.
TECHDUELS IS BACK WITH ONE OF THE HOTTEST TOPICS

Is Generative Ai a Threat to Cybersecurity?

SEPTEMBER 14, 2023 | 6PM–9PM
AT GEORGE MASON UNIVERSITY

REGISTER NOW AT
WWW.TECHDUELS.COM

Team Con

Brian Drake
Federal Chief Technology Officer
at Accrete AI Government

Raz Choudhury
Co-Founder at Samai

Team Pro

Jared Shepard
Chief Executive Officer at Hypori

Ebrima Ceesa
Sr Cybersecurity Director and Distinguished Engineer at Capital One

RECEIVE YOUR CPE TRAINING CREDITS FOR ATTENDING

AWS Skilled Talent Job Fair
Looking for **internships and full-time** cloud roles? Join us at the AWS Skilled Talent Job Fair where you can network with **companies** in the DC-metro area who are looking for you, too!

These employers will be actively recruiting for entry-level tech roles:

- Cloud Support Associate
- Software Developer Engineer
- Data Integration Specialist
- Data Analyst
- IT Support Specialist
- ...and others!

**When:** Tuesday, 9/19, 1-4p EDT

**Where:** AWS Arlington Skills Center - 1550 Crystal Drive, Suite G, Arlington, VA 22202

**Register:** Below by September 15th

bit.ly/GMU-AWS-919
Please join the U.S. National Science Foundation and our federal agency and industry partners as we celebrate and share the work of our 25 National Artificial Intelligence Research Institutes, or AI Institutes, on Capitol Hill.

**FEATURED SPEAKER**
Senator Martin Heinrich  
(D-NM) Co-chair, Senate AI Caucus

**WELCOMING REMARKS**
Dr. Sethuraman Panchanathan  
Director, U.S. National Science Foundation

**Tuesday, September 19, 2023**  
10:00 a.m. - 1:00 p.m. EDT

**OPENING REMARKS: 10:30 A.M. - 11:00 A.M.**  
**INTERACTIVE SHOWCASE: 11:00 A.M. - 1:00 P.M.**

*Hart Senate Office Building, Room 216*

Learned in 2020, the AI Institutes represent a $500 million investment connecting over 500 funded and collaborative institutions across the U.S. and around the world. Attendees will have the opportunity to learn about real-world applications of AI and see firsthand the technologies that are transforming the AI field and the many ways in which federal investments are being used in AI research, innovation, community partnerships and workforce development.

To learn more about the AI Institutes program, please visit [National AI Research Institutes](https://www.nsf.gov). Credit: U.S. National Science Foundation.

**CONTACT:** For questions, please contact D’Elia Wernecke ([dwernecke@nsf.gov](mailto:dwernecke@nsf.gov)).

This NSF-sponsored event is made possible, in part, with generous support from the Coalition for National Science Funding.

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**George Mason University - Blast Off Week**
Mason I-Corps Quantum Cohort at QWC

Mason and the 2023 Quantum World Congress have partnered to bring you the Mason I-Corps Quantum Cohort. Costs for this event, along with registration fees to the Quantum World Congress, will be covered by Mason. The U.S. National Science Foundation’s Innovation Corps (I-Corps™) program is an immersive, entrepreneurial training program that facilitates the transformation of invention (or research) into impact.

During this experience, you will learn an evidence-based approach to idea evaluation with regards to market viability. Is the idea desirable? Who is the ideal audience? Where do you even start? This cohort is here to help answer those questions. Centered around customer discovery and Lean Launch methodology, you will determine if your idea solves a need and for whom.
Artificial Intelligence for Scientific Discovery Workshop

This workshop explores the future of AI in terms of its role as an autonomous researcher performing scientific discovery. This includes where AI stands, where it needs to go, and which disciplines should have increased investment for the utilization of AI scientists. Sessions for the workshop will include what it means to be an AI scientist, societal aspects of AI, hurdles to achieve AI-independent scientific discovery, and steps in the
direction of AI grand challenges. The workshop will also explore the ethical aspects and potential pitfalls that
loom for AI scientists throughout.

Event date: **October 12-13, 2023**

More information [here](#).

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**Mason Libraries - Artificial Intelligence Salon Series**

Join Mason Libraries for a series of scholarly discussions regarding artificial intelligence (AI) technologies such
as ChatGPT and their effects on higher education and society. They will facilitate open dialog for learning more
about this rapidly expanding topic and what it means for Mason and the global community.
AI Salon Series 2023

- **Al in Business and Government**
  - September 21st, 4pm-5pm
- **Al, Ethics, and Academic Integrity**
  - October 9th, 4pm-5pm
- **Al in the Arts and Humanities**
  - November 15th, 4pm-5pm
- **Al in the Social Sciences and STEM**
  - December 6th, 4pm-5pm

All salons will be moderated by Mason librarians and held in the Fenwick Library Main Reading Room (Level 2).

For more information, contact Dr. Heidi Blackburn, hblackbu@gmu.edu

How Attention in 2017 Got Us ChatGPT Talk

The 2017 “Attention is All You Need” paper introduced the transformer architecture. In the past six years, interest in the transformer architecture has only grown, and now the capabilities of GPT4 are the subject of frenzied media attention in the popular press as well as research groups at OpenAI, Microsoft, HuggingFace, Argilla, Google, Facebook, and others. The emergence of the transformer architecture heralded the current era of large language models (LLMs). But how do they work? Should you be intimidated by their inner workings? Are they magic? Are they really artificial general intelligence (AGI)? What does each component do?
This talk will briefly walk through each component visually and make them understandable in historical perspective no matter the level of expertise in machine learning (ML). Dr. Kaufhold will make complex Transformer concepts accessible to a broad audience while also incorporating the more relevant themes of deep learning of interest to more advanced ML engineers — the themes that led to its dominance.

Find Dr. John Kaufhold's bio [here](#).

Venue: Mason Square (Van Metre Hall)

Event date: September 20, 2023 at 6:00 PM EST

Register [here](#).

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**2023 DataTribe Challenge**

The DataTribe Challenge is a unique annual competition where startups have a chance at receiving up to $2 million in seed capital. The Challenge brings together the best entrepreneurs in the world looking to disrupt cybersecurity and data science. DataTribe selects three finalists that split $20,000 in prize money and one winner that could receive up to $2 million in seed capital.

Applications deadline: September 23, 2023

More information available [here](#).

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**Drone Prototyping Short Course Fall 2023**
Postdoctoral Research Fellowships in Biology

Join the Division of Molecular and Cellular Biosciences (MCB) at the National Science Foundation for our next virtual office hour. The topic will be Postdoctoral Research Fellowships in Biology (PRFB; NSF 22-
623). Program Directors will be present to address your questions.

Event date: **September 13** at **2:00PM EST**.

Register [here](#).

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**National Science Foundation STEM Education**

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.

Proposal deadline: **September 27, 2023**

More information available [here](#).

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**CCI OPPORTUNITIES**

**CCI Hub Call for Proposals - Supply Chain Cybersecurity**

CCI seeks proposals for seed research grants that advance the state of the art of Supply Chain Cybersecurity by building capacity and increasing competitiveness.

Proposal deadline: **September 25, 2023** by **5:00 PM EST**

More information available [here](#).

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**CCI Paid cybersecurity Internship opportunity**

The objective of this experiential learning opportunity is to encourage students to gain work experience in a tech startup and to familiarize themselves with the world of cyber entrepreneurship, with the hope that one day perhaps, the students can launch their own tech company.

Proposal deadline: **September 8, 2023**

More information and registration available [here](#).
CCI faculty and student founders are invited to connect and network with leading Virginia venture capitalists at George Mason University's Horizon Hall. This networking opportunity provides students and faculty to share their research, receive feedback, meet, and discover what is top of mind from investors.

Venue: MIX Room# 2107

Event Date: October 18, 2023, from 4:00 PM to 7:00 PM EST

Register here.

Congratulations to:

**Pfoser, Dieter** from the College of Science and Co-PIs **Kavak, Hamdi** and **Anderson, Taylor M** for receiving the US Department of the Interior grant on *HAYSTAC – METROPOL*.

**Shishika, Daigo** from the College of Engineering and Computing for receiving the Air Force Research Laboratory grant on *Rethinking Assignment-based Methods in Multi-agent Differential Games*.

**Odstrcil, Dusan** from the College of Science for receiving the National Aeronautics and Space Administration grant on *A Holistic Heliospheric Solar Cycle Approach to Heliospheric Evolution from UCSD 3-D Reconstructions Using Thomson Scattering Data from the STEREO HI, and SMEI Imagery, and Interplanetary Scintillation Observations*.

**Snyder, Mark Huntington** from the College of Engineering and Computing for receiving the Northeastern University grant on *NU/Inclusive Computing - Revision – 1*.
FUNDING OPPORTUNITIES

National Science Foundation - Advanced Technological Education (ATE)
Deadline: October 5, 2023

National Science Foundation - EDU Core Research (ECR:Core)
Deadline: October 5, 2023

National Science Foundation - Major Research Instrumentation
Deadline: November 15, 2023

IDIA AFFILIATION

Did you know that, as an IDIA faculty affiliate, you are eligible to:

- Compete for internally funded IDIA projects
- Receive support for IDIA-relevant events
- Become part of the dynamic multidisciplinary faculty network focused on digital techniques and technologies to advance fields as diverse as finance, education, built infrastructure, science, economics, agriculture, health, transportation, entertainment, national security, and social justice.

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 idia2@gmu.edu