



#### Dear Colleagues,

In this IDIA edition of faculty spotlights, we bring to you an amazing group of Mason faculty engaged in research with impact. Jana Kosecka, Bo Han, Songqing Chen, Evgenios Kornaropoulos, Brittany Johnson, and Antonios Anastasopoulos have recently obtained tech industry awards from Google, Meta, and Amazon. Their awards are a wonderful recognition of their creativity, passion, and dedication to digital innovation and, more broadly, of George Mason's growing footprint in the nation's research landscape.



Read more here.

## = UPCOMING EVENTS =

### <u>AI Innovation Symposium</u>



## <u>REU Site in Pervasive Computing for Smart Health, Safety, and Well-</u> <u>being</u>

The REU Site in Pervasive Computing at Temple University will host a diverse group of talented students from universities across the nation to engage in an intensive 9-week summer research experience. Selected participants will engage as part of a research community that focuses on designing pervasive computing systems that employ sensing, actuation, and data science to improve the health, safety, and well-being of the general public. In addition to addressing problems of broad societal importance, REU Site student projects have the potential to develop new algorithms and technologies that advance the state of the art in pervasive computing and its component areas of IoT, wearable computing, computer vision, and data analytics. Projects are led by faculty with outstanding research credentials and extensive experience in mentoring undergraduate research projects.

#### Apply here.

Application Deadline: Wednesday, August 2, 2023

More information is available here.

## Creating Extended Reality of the Future with AI and Computational Design Seminar





## CREATING THE EXTENDED REALITY **OF THE FUTURE WITH ARTIFICIAL** INTELLIGENCE AND COMPUTATIONAL DESIGN

NOVEMBER 17, 2022, 5:00PM - 6:30PM | IN-PERSON @ MASON SQUARE IN ARLINGTON



- SPEAKER: CRAIG YU
- ASSOCIATE PROFESSOR, COMPUTER SCIENCE DEPARTMENT, GEORGE MASON UNIVERSITY
- FACULTY LEAD, DESIGN COMPUTING AND EXTENDED REALITY (DCXR) GROUP, GEORGE MASON UNIVERSITY

### WHAT WE'LL DISCUSS:

In this seminar, we will explore how the research efforts by Mason's Design Computing and Extended Reality (DCXR) group may bring exciting XR applications and opportunities ahead, especially 5-10 years from now. We will also discuss recent advances of the research group on using artificial intelligence and computational design approaches to devise novel user experiences, contentcreation tools, and user interfaces for envisioning the XR of the future

### **KEY TAKEAWAYS INCLUDE:**

- Al can be widely applied to automate the design of humancentric environments, whether in real or virtual reality
- AI-powered XR applications will transform the future of work, entertainment, healthcare, education, business, and everyday life



### **REGISTER HERE!**

Mason Square @ Arlington | Vernon Smith Hall | Plaza Level

# STUDENT OPPORTUNITIES=

## DARPA Young Faculty Award Program

The Defense Advanced Research Projects Agency (DARPA) Young Faculty Award (YFA) program aims to identify and engage rising stars in junior research positions in academia and equivalent positions at non-profit research institutions, particularly those without prior DARPA funding, to expose them to Department of Defense (DoD) needs and DARPA's mission to create and prevent technological surprise. The YFA program will provide high-impact funding to elite researchers early in their careers to develop innovative new research that enables transformative DoD capabilities. Ultimately, the YFA program is developing the next generations of researchers focused on national security issues.

Questions? Contact <u>YFA2023@darpa.mil</u>

Application Deadline: Tuesday, February 7, 2023

More information is available here.



## = VARIOUS OPPORTUNITIES =

## Request for Information for the ODNI AI Engineering Academic <u>Research Roadmap</u>

The University of Maryland Applied Research Laboratory for Intelligence and Security (ARLIS) is requesting information from Not-For-Profit Academic Institutions (particularly members of the Intelligence and Security University Research Enterprise (INSURE)), Federally Funded Research and Development Centers (FFRDC), and University Affiliated Research Centers (UARCs) in support of the National Artificial Intelligence (AI) Engineering Initiative, sponsored by the Office of the Director for National Intelligence (ODNI). The purpose of this Request for Information (RFI) is to solicit from the larger national academic ecosystem information relevant to the development of an Academic Research Roadmap. The Research Roadmap will identify gaps and opportunities that will help frame funding priorities for academic research and collaborative agreements, as well as accelerate the Intelligence Community's (IC) adoption of AI technologies.

Response Deadline: Thursday, December 15, 2022 by 5:00 pm EST

More information is available here.

## Save the Date for UMD: Advancing National Priorities in Language,

Culture & Technology



## Save the date!

Advancing National Priorities in Language, Culture & Technology: A University-Government Forum

Learn how UMD's language expertise supports the government's tactical and strategic missions.

## November 30, 9 am - 4 pm

Jointly hosted by the Applied Research Lab for Intelligence & Security, the Language Science Center, and the National Foreign Language Center

This is an in-person event in College Park. Details to follow.



## RISC 2023 Internship: Application Site Now Open

May 30 - August 4, 2023

**Summer Internship Opportunity** 

VERSITE

Virtual & In College Park, MD

APPLIED RESEARCH LABORATORY FOR







### Duration

10 Weeks | 5/30 - 8/4

### Eligibility

- Graduate and undergraduate students - Should not have graduated before Fall 2022 - Must be a U.S. citizen
- Must be available full-time for the duration of the program

#### Disciplines

- Computer Science
- Information Science
- Engineering
- Mathematics & Statistics
- Social & Behavioral Sciences - Language & Linguistics
- Data Science
- Public Policy

#### Remuneration

Hourly basis equivalent to \$9,000-12,000 over 10 weeks.

#### Application Deadline

- Monday, February 6th, 2023

#### To Apply

www.arlis.umd.edu/ risc2023\_application





The Applied Research Laboratory for Intelligence and Security (ARLIS) at the University of Maryland, College Park, is seeking outstanding undergraduate and graduate students to participate in the virtual

Research for Intelligence & Security Challenges (RISC) Initiative internship program. This exciting 10-week paid program pairs students with faculty mentors from **INSURE** consortium member institutions and the Department of Defense (DOD) and Intelligence Community (IC) community, and offers the opportunity to be sponsored for a security clearance and to be considered for future employment with the U.S. government.

Students will be introduced to career opportunities with the DoD and IC as well as develop their technical capabilities through hands-on real world problems. Project topics will be posed by government operators, and supported with realistic data sets and other materials. Over the 10-week period, students will conduct research and participate in lectures and regular team development meetings in a shared virtual work environment. The summer program will conclude with a demonstration event and workshop, with a panel of visiting experts from DOD/IC to discuss the results.



## = AWARDS =

#### Congratulations to:

Sherry, Lance C. from the College of Engineering and Computing and co-PIs Shortle, John F and Xu, Jie for receiving the University of Maryland College Park (UMD) grant on Artificial Intelligence and Advanced Analytics to Estimate Collision Risk during Departure and Arrival.

Ferah, Munshi from the College of Science for receiving the National Science Foundation (NSF) grant on Testing SIDM with Realistic Galaxy Formation Simulations.

Wisniewski, John from the College of Science for receiving the National Aeronautics and Space Administration (NASA) grant on Pulsation and Disks of Be Stars as Tracers of Stellar Structure, Evolution, Pulsation-Driven Mass Loss, and Disk Physics.

Simon, Robert P. from the College of Engineering and Computing for receiving the Axiom, Inc. grant on Network Level Awareness for mobile 5G systems.

## = FUNDING OPPORTUNITIES ====

Jefferson Science Fellowship

Deadline: Continuous Submission

RFP -- Multi-Sensor Exploitation for Tactical Autonomy (META)

Deadline: Continuous Submission

## **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.cdu





Manage your preferences | Opt out using TrueRemove™ Got this as a forward? Sign up to receive our future emails View this email online.

George Mason University | 4400 University Drive Fairfax, VA | 22030 US

This email was sent to . To continue receiving our emails, add us to your address book.