

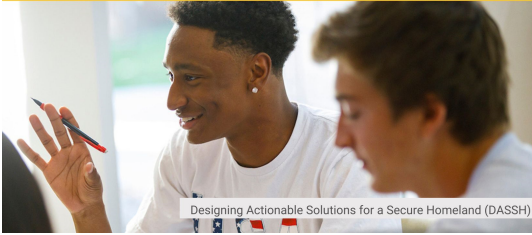


Project In-depth: Assessing trustworthiness of AI-enabled Systems (New Video)



The project “Trust in AI-Enabled Decision Support Systems” being led by Erin Chiou and Mickey Mancenido, Arizona State University is developing standards that have the potential to drive design and development of trustworthy systems, and to more cost-effectively evaluate AI-enabled systems during technology acquisition or regulation.

In this video, Chiou and Mancenido along with student researchers from ASU discuss the value and progress of the project and how the work of CAOEE is making a tangible difference by improving efficiency in homeland security operations.



CAOE and SENTRY invite Minority Serving Institutions (MSI) to join student design challenge this spring

DASSH (Designing Actionable Solutions for a Secure Homeland) Event/Hackathon

To ensure the Department of Homeland Security can continue to operate efficiently, it is imperative to maintain an active pipeline of new homeland security professionals. One of the most efficient ways to encourage college students to pursue careers within the homeland security enterprise is to expose them to real-world homeland security issues.

To address this, two DHS Centers of Excellence, the Center for Accelerating Operational Efficiency (CAOE) at Arizona State University and Soft-Target Engineering to Neutralize the Threat Reality (SENTRY) Center at Northeastern University, will be hosting a DASSH (Designing Actionable Solutions for a Secure Homeland) event the weekend of February 24-26, 2023.

About DASSH:

- The three-day design challenge event will pair students with academic and industry mentors to solve real-world problem scenarios. The problem scenarios for this event will be related to public access areas including managing crowds during an attack and enabling effective communications among responders in times of public crisis
- Although many design events/hackathons may be focused on coding challenges, this event is about finding real solutions regardless of the medium where those solutions reside
- CAO E is sponsoring 3-5 selected minority-serving institutions to participate in the event

About the RFP to Fund MSI Teams

- To qualify, interested faculty must be able to recruit a team of 3-6 members and be willing to coordinate the logistics and communication between the team and the hackathon leadership group at ASU and Northeastern University
- A formal proposal review process will be conducted to select those for which a grant award will be offered.

- All proposals must be submitted through the CAO E grant application portal.

Please click here for the complete RFP guidelines and instructions.

RFP DEADLINE: November 18, 2022

Specific questions about this request for proposals should be addressed in writing to Professor Ross Maciejewski, Director CAO E, or Anthony Kuhn, Associate Director of Education, CAO E at CAOE@asu.edu



New Seminar Series – Privacy Enhancing Technologies (PETS) Challenges, Opportunities and Advancements

Privacy-enhancing technologies (PETs) under development promise the ability to control the sharing and use of sensitive information while minimizing the risk of unauthorized use. These technologies have been under development by researchers for nearly four decades but have been slow to migrate from the research lab into operational use. In this seminar series, we invite luminaries from across the globe to discuss the state-of-the-art in privacy enhancing technologies describing challenges, opportunities, and advancements with respect to technology development and uptake.

Seminar Schedule

November 10, 2022 - 12pm EST

Dr. Rafail Ostrovsky

Norman E. Friedmann Distinguished Professor of Computer Science and Mathematics, UCLA

Co-founder and Board Member of Stealth Software Technologies, Inc

"Deriving Actionable Intelligence from Siloed Data"

[MORE INFORMATION](#)

December 8, 2022 - 12pm EST

Dr. L. Jean Camp

Director of Center for Security and Privacy in Informatics, Computing, and Engineering

Professor of Informatics

Indiana University

[MORE INFORMATION](#)

January 12, 2023 - 12pm EST

Dr. Steve Lu

CEO of Stealth Software Technologies, Inc



CAOE Receives additional funding for Red Teaming Work to Counter WMD

After a successful project investigating the post-COVID strategic biological weapons landscape, CAOE has received funding for a follow-on effort exploring how the use of chemical weapons in Syria and for assassination purposes might have affected norms and intentions regarding these weapons. A team of researchers, led by Gary Ackerman, Professor, University of Albany (State University of New York) will apply their technique of Asynchronous Strategic Dynamics Red Teaming – which involves red teaming simulations of decision maker choices – to this new question. This project extends from October 2022 to March 2024 and is funded through a task order under CAOE basic ordering agreement and supports both the Defense Threat Reduction Agency and the Countering Weapons of Mass Destruction Office of DHS. “We are pleased that our initial work has been of value to the shared mission of both DOD and DHS to prevent the use of weapons of mass destruction and look forward to delivering new insights in the chemical weapons threat domain,” stated Ackerman.

Student researcher highlights



Enoch Bonsu

North Carolina A&T State University

Field of study: PhD Industrial Engineering

Developing a better understanding of the impacts to the food supply chain during disasters

The COVID-19 pandemic had dramatic effects on every aspect of our society, including the country's food supply. Many workers in the food industry were impacted by illness, worker shortages and exposure to the disease.

Student researcher, Enoch Kwabena Bonsu is helping to determine if cultural practices in their homes impacted these workers and the productivity of food processing. He is working with the Center for Accelerating Operational Efficiency (CAOE) on a project titled "The Effects of COVID-19 on the Food Supply Chain as a Result of Living in Close Quarters."

This research is a subset of a larger CAOE project, "Optimization for Disaster Response," under the leadership of Principal Investigator, Pitu Mirchandani. In this focused study, Bonsu is researching the effects of a disturbance like the pandemic has on the food supply chain, including workers, productivity and stress applied to the chain itself. He hopes to provide insight that could lead to an optimized response to future events. [**READ MORE**](#)



Hayley Peterson

**University of Albany- State
University of New York**

**Field of study: MBA, Information
Systems & Business Analytics
(Graduated May 2022)**

**Research Associate and Exercise
Designer at the Center for
Advancing Red-Teaming**

Analyzing red-teaming data and developing risk assessments

In today's world, the United States receives numerous threats from adversaries. The U.S. Department of Homeland Security (DHS) is tasked with validating the risks of these tactical-level behaviors that continue to adapt and grow in complexity. This capability is critical for the agency's mission, especially for agencies like the Transportation Security Administration (TSA).

The Center for Accelerating Operational Efficiency (CAOE) has a project team currently studying the creation of a validation framework for these threats. This project is called "Validating Adaptive Behavioral Models of Adversaries Risk Assessments" (VAMBRA). Recent MBA graduate, Hayley Peterson is among those working toward the solution creating a viable, low-cost validation framework solution to assist TSA risk assessment models and testing procedures.

Her role on this project is to analyze the data collected from the participants of the red-teaming exercises and develop operational reports of key findings from the study for use by various end-users. "For me, the most challenging part of the project was understanding the statistical analysis processes that were used. But I enjoy my role in analyzing the data we captured and turning it into written and graphical depictions that were easy to communicate to stakeholders," Peterson said. [READ MORE](#)

Adam Rose selected as Society for Risk Analysis Fellow



Adam Rose a CAOE researcher and professor at USC has been selected as a Society for Risk Analysis Fellow based on his substantial contributions in sciences and public policy in risk and analysis. This honor will be awarded during the Society for Risk Analysis Annual meeting in Tampa, Florida on December 4-8, 2022.

Society for Risk Analysis is an international multidisciplinary, interdisciplinary, scholarly society that provides an open forum for all those who are interested in risk analysis. The organization brings together individuals from diverse disciplines and from different countries and provides them opportunities to exchange information, ideas, and methodologies for risk analysis and risk problem solving.

Upcoming Events

Privacy Enhancing Technologies (PETS) Challenges, Opportunities and Advancements Seminar Series

November 10 - Dr. Rafail Ostrovsky

December 8 - Dr. L. Jean Camp

January 12, 2023 - Dr. Steve Lu

DASSH Event Student Design Challenge - February 23-24, 2023