

Marketing Communications (MarCom) Menomonie, Wisconsin 54751

NEWS RELEASE

Contacts

Abbey Goers, Marketing Communications, 715-232-2565 Marketing Communications, 715-232-2381 News Center

în f

UW-Stout cybersecurity program director receives national Visionary Academic Leadership Award

Yuan recognized for 'pushing the envelope' to train next generation at Cyber Security Summit

<u>Story Link</u> Photos attached

FOR IMMEDIATE RELEASE Nov. 5, 2024

Menomonie, Wis. – For leading the way in cybersecurity and for her outstanding educational contributions to the industry, University of Wisconsin-Stout Professor Holly Yuan received the Visionary Academic Leadership Award at 14th annual <u>Cyber Security Summit</u>.

The summit, held recently in Minneapolis, brings together cybersecurity professionals, educators and students from across the nation to tackle emerging challenges and to protect people, processes and property.

Yuan is the program director of <u>B.S. cybersecurity</u> and <u>B.S. computer networking and infrastructure</u> <u>engineering</u> and founding director of UW-Stout's <u>Cybersecurity Research and Outreach Center</u>, which promotes cybersecurity research, education and workforce needs for the state of Wisconsin.

Yuan has secured funding from the Department of Defense, Department of Workforce Development, and other agencies to engage students in cutting-edge research involving cybersecurity, AI and cloud computing. This work has enabled students to earn scholarships, internships and secure roles in the field.

"I'm honored to be recognized with the Visionary Academic Leadership Award. Receiving this award is incredibly meaningful to me. It's a recognition of the collective efforts of our students, faculty and partners. I'm grateful for all the support I've received along the way," Yuan said.

Six students were awarded summit scholarships to attend the event at no cost:

- Ethan Coulthard, cybersecurity, Neenah
- Chloe Kaneski, cybersecurity, Minneapolis
- Fletcher Meyer, computer science, cybersecurity, Appleton
- Alexander Nachreiner, computer science, Mound, Minn.
- Liam Nicholson, cybersecurity, Milwaukee
- Owen Pryga, cybersecurity, Grafton

"The students received praise for their engagement and professionalism, further solidifying the program's strong reputation. Everyone just loved them," Yuan said. "A member of the Cyber Security Summit Think Tank Advisory Board remarked, "The future is bright,' recognizing their energy and potential."

Alumni David Tesar, a security service agent at a national cybersecurity company, and Cheyne Taylor, a graduate student representative for the Think Tank advisory board, joined to celebrate with the students. Taylor supported Yuan's nomination.

"When I was given the opportunity to nominate an individual for this honor, Dr. Holly Yuan came to mind immediately," Taylor said. "Dr. Yuan has been an outstanding faculty member and a strong advocate of her students and UW-Stout to numerous IT firms nationwide. She is always striving to provide the best opportunities for her students by bringing in partnerships from both the private and public sectors. Outside of creating CyROC and establishing the B.S. cybersecurity degree, Dr. Yuan also takes time to mentor students throughout their undergraduate career."

Students are prepared for cybersecurity careers

With UW-Stout's focus on hands-on and experiential learning, Yuan believes graduates are equipped not just with theoretical knowledge but also with practical skills through internships, capstone projects and industry certifications.

"This hands-on approach ensures our students will be successful in their careers," she said.

Pryga, president of the university's Collegiate Cyber Defense League, and CCDL vice president Nicholson, think that one of the hardest parts about leading a cybersecurity program is to evolve alongside the fast-moving industry and to push the envelope to train the next generation of professionals.

"Holly has really been helping to advance the industry through her work in pushing UW-Stout's program. This has and will continue to produce students who are up-to-date with the industry and are confident and capable of becoming effective professionals and leaders in the field," Nicholson said.

For example, in response to the rapid expansion of artificial intelligence, Yuan and faculty have integrated AI into the curriculum, including a new course called Application of Generative AI in Cybersecurity.

"This course explores how AI can be leveraged to enhance cybersecurity controls and processes, helping our students stay ahead of emerging trends. In the field of cybersecurity, generative AI is quickly becoming a tool for both defensive and offensive measures. We're focused on integrating these aspects into our curriculum to ensure our students are well-equipped to address challenges," Yuan said.

"Holly creates this unmatched enthusiasm for everyone involved. She works so hard for the program, and the students and alumni see the hard work she puts in and want to help her out in any way they can," Pryga said. "Holly regularly keeps up with people in the industry to ensure that the program is up-to-date, and the employers are happy with Stout graduates. She supports the students in a variety of ways, encouraging employers to hire Stout students throughout the semester, giving students hands-on work experience before they graduate."

Pryga and Nicholson will graduate in spring 2026. They plan to work in an incident response role or as a cybersecurity analyst; and security research, engineering or offensive security, respectively.

Addressing Wisconsin's cybersecurity and AI needs

In spring 2023, UW-Stout received a \$298,771 <u>cybersecurity internship grant</u> to address Wisconsin's workforce and infrastructure needs. The Fast Forward grant is from the state <u>Department of</u> <u>Workforce Development</u> and Universities of Wisconsin. It provides paid industry internships to students enrolled in cybersecurity-related programs.

UW-Stout <u>Career Services</u> Director Bryan Barts thinks the DWD internship program creates a total win-win scenario for students and employers.

"Students looking to use the skills they built in Stout programs on real world projects for actual employers demonstrate the polytechnic education in practice," he said. "Employers looking to make their organization, services, products and especially data more secure are finding students bringing insights and impacts right away. This program brings both together in impressive ways." Ezra Wilhelmy, cybersecurity, Maple Grove, Minn., began an internship at Yahara Software, in Madison, through the DWD program in July. They have accomplished impressive work, said Yuan, including designing a security pipeline, conducting security scans and collaborating closely with the DevSecOps team. They presented to more than 40 engineers and leaders at Yahara, including the CEO, providing a great overview of their achievements during the internship. Wilhelmy is completing the DWD internship remotely this fall semester, with an expected end date in December.

"It's inspiring to see the real-world impact our students are making through these opportunities," Yuan said.

Thirty companies have partnered with Career Services through the DWD internship program to recruit students: 3RT Networks, Malisko Engineering Inc., Greenheck Fan, IBM, Yahara Software, Promega, Heartland Business Systems, Trellis Management, City of Menomonie, ND Paper, TechHorizon Consulting, Nelson-Jameson Inc., School District of Holmen, Wieser Concrete Products Inc., Mystic Lake Casino, School District of Cudahy, In Control Inc., BouMatic, Dove IT Services, Kayres Counseling LLC, L.E. Phillips Career Development Center, Chippewa Valley IT Consulting, Sanmina, Maxcess International, the State of Wisconsin Department of Administration -Division of Enterprise Technology, MacaroniKIDMadison, Black River Country Bank, Anderson Engineering of MN, Plastic Ingenuity Inc., and the Dirks Group.

A recent \$124,555 federal grant from the U.S. Department of Defense Cyber Service Academy will create ACCESS — the AI-Powered Cloud Cybersecurity Maturity Model Certification and Education Support System. The DoD program, beginning in 2025, will help businesses guard against cybersecurity threats. It will require defense supply chain partners that handle sensitive unclassified information to meet stringent cybersecurity standards.

Yuan will lead development of a network prototype that simulates a manufacturing system, incorporating cloud service providers, headquarters, branch offices and teleworkers.

The certificate program will also strengthen career opportunities and industry workforce readiness for cybersecurity and CNIE majors, prospective students and professionals in the field.

Yuan is also working to expand CyROC's community engagement opportunities through hands-on cybersecurity workshops.

UW-Stout is designated as a <u>National Center of Academic Excellence in Cybersecurity for Cyber</u> <u>Defense</u> from the National Security Agency through the 2028 academic year. UW-Stout was the first four-year university in the state to receive it in 2017, a standard that only about 4% of schools in the United States earn.

UW-Stout, a member of the <u>Universities of Wisconsin</u>, is <u>Wisconsin's Polytechnic University</u>, with a focus on applied learning, collaboration with business and industry, and career outcomes. Learn more via the <u>FOCUS2030</u> strategic plan.

###

Photos

Holly Yuan, center, program director of B.S. cybersecurity and B.S. computer networking and infrastructure engineering at UW-Stout, receives her Visionary Academic Leadership Award at the 14th annual Cyber Security Summit, in Minneapolis. Photo by Cyber Security Summit, cybersecuritysummit.org.

Holly Yuan, third on right, with cybersecurity students and alumni at the Cyber Security Summit. Photo contributed by Cheyne Taylor.