



VICEROY NORTHWEST INSTITUTE FOR CYBERSECURITY EDUCATION AND RESEARCH



CySER Virtual Seminar

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*Building and Scaling a Statewide Educational Cyber Range:
Real-World Data, AI/ML, and Hands-On Cybersecurity Education*

Sep. 23, 2026, 11:10 – 12 PM Pacific

Team Link: [Click here to join the meeting](#)

Meeting ID: 210 341 746 871 903 | Passcode: eX26JZ67

Abstract:

The Washington State Educational Cyber Range has grown from a university resource into a free, open educational platform serving all public universities and community colleges in Washington, along with expanding K-12 programs. In this talk I will share how we designed and operate a hybrid on-premise and cloud infrastructure that supports advanced training, live competitions, and applied research. I will highlight our real-world data pipelines (including large-scale public infrastructure monitoring and honeypot collections), the integration of AI/ML for analysis and student projects, and the special projects model that connects academic teams with industry and government partners such as PNNL, the U.S. Naval Undersea Warfare Center, and others. The session will also cover opportunities for students to engage in research, internships, and production deployments, and how institutions can leverage the range for curriculum and experiential learning.

Bio:

Vipul Kumar is Director of the Washington State Cyber Range at Western Washington University, where he also serves as Adjunct Professor and Advanced Research Advisor. He leads the expansion of the Cyber Range into a statewide educational resource used by universities, community colleges, and K-12 programs, securing significant funding and forging partnerships with industry and government organizations including Boeing, Microsoft, Cisco, and Pacific Northwest National Laboratory. With deep expertise in full-stack development, distributed systems, cloud infrastructure, and applied AI/ML in cybersecurity, Vipul brings extensive industry experience architecting hybrid data centers, automation stacks, and large-scale data/AI pipelines. He manages operations, mentors student research teams, and continues hands-on platform and infrastructure development for the Cyber Range.



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