VICEROY NORTHWEST INSTITUTE FOR CYBERSECURITY EDUCATION AND RESEARCH

CySER Virtual Seminar

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Hierarchical Software Quality Assurance
Mar. 4, 2024, 3:10 – 4PM Pacific

Team Link: **Click here to join the meeting**
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Abstract:

The advancement of cyber adversaries has led to increased frequency and complexity of cyber-attacks on everything from U.S. military systems to the U.S. voting infrastructure. By the end of 2023, many cyber security positions were unfilled and there is a great need to automate cyber security as completely as possible. Hierarchical Software Quality Assurance (HSQA) is a proposed defense mechanism that protects systems along the supply, build, and development paths by allowing cyber warriors to deploy quality gates that filter potential threats by leveraging existing investments in tools and infrastructure. The development of hierarchical techniques is not without its problems and we will discuss them in this talk. We will also showcase other work we are currently doing at the Software Engineering and Cybersecurity Laboratory (SECL).

Bio:

Dr. Izurieta is a full professor of computer science in the Gianforte School of Computing at Montana State University. He is a joint appointment with the Idaho National Laboratory, and the Pacific Northwest National Laboratory. His research interests include quality assurance, technical debt, and cybersecurity. He received his Ph.D. in computer science from Colorado State University, MS in computer science from MSU, and a BS in mathematics from the University of Wollongong in New South Wales, Australia. He co- directs of the Software Engineering and Cybersecurity Laboratory (SECL) at MSU that currently supports 1 postdoc, 8 PhD, 4 MS, and 4 undergraduate students. Funding for the SECL comes from National Science Foundation, US Department of Defense, Department of Homeland Security, Army, Air Force, Special Operations Command, and private industry. Prior to his academic career, Dr. Izurieta spent 16 years at Hewlett Packard's Unix Development Laboratories and Intel Corporation's Itanium Laboratory.

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