GSAW 2023 Tutorial E:

DevSecOps Concepts and Considerations for Ground Systems

Overview:
An overview of the DevOps or DevSecOps. Technologies and infrastructure required for adopting DevSecOps. Differences between DevSecOps in the commercial compared to Government programs. How other federal government agencies are using DevSecOps?
- DevSecOps fundamental concepts
- DevSecOps roles and responsibilities
- DevSecOps practices and activities
- DevSecOps infrastructures and technologies
- DevSecOps constraints and limitations in Ground systems
- Lessons learned on DevSecOps for Ground systems

Instructors: Jason McKenney and John Hathaway, The Aerospace Corporation

Biographies:
Jason McKenney is an Engineering Specialist in the Software Systems and Acquisition Department at The Aerospace Corporation. He has more than 20 years of experience with software development, integration, and test activities. Most of his career has been spent with commercial firms developing software, designing continuous integration pipelines, and leading small teams. He is a key author of an unpublished report on agile ground software system integration and test. He has a B.S. in Telecommunications from the University of Kentucky, and an MBA from California State University – Dominguez Hills.

John R. Hathaway is Senior Project Leader in the Software Systems and Acquisition Department at The Aerospace Corporation in Chantilly, Virginia. He works with customers to make appropriate preparations for acquiring software-reliant systems and informed decisions throughout the system development lifecycle. He has over 40 years of experience in designing, developing, implementing, operating, and managing systems in support of commercial and federal government customers. Mr. Hathaway is led a team that is built a Development Security and Operations (DevSecOps) pipeline for a Department of Defense customer. He has supported projects using Agile and DevSecOps methodologies on the Amazon Cloud. He led a team that performed risk reduction task that tested several cloud patterns that supported one to many fan-out of data distribution. He has Bachelor of Arts in Mathematics from the University of Maine and a Master of Computer Science degree from George Mason University.

Description of Intended Students and Prerequisites:
Geared toward individuals with moderate software development experiences.

What can Attendees Expect to Learn:
Key concepts of DevOps or DevSecOps, tools and technologies for DevSecOps adoption. Things to consider for DevSecOps adoption for Ground systems.