Thursday, January 30, 2025

9:40 AM – 10:00 AM

IRONCLAD: Integrated Resilient Operations for Naval Cloud and AI Deployment

Nikhil Shenoy

CEO

Colvin Run Networks Inc.

Abstract:

The IRONCLAD initiative develops and deploys prototypes of a cutting-edge multi-cloud MLOps (Machine Learning Operations) platform tailored for the US Navy's unique operational needs. Leveraging the combined expertise of Colvin Run Networks, Google Cloud, and Noctua Technology, this project will integrate advanced Artificial Intelligence (AI) and machine learning capabilities into a secure, scalable multi-cloud environment. The primary objectives include establishing a multi-cloud architecture, implementing secure cloud foundations, and deploying three initial use cases: Drone Identification Vision Model, Translation Model for Coalition Communications, and Anomaly Detection Model. Additionally, the project will enhance the platform with Generative AI for Intelligence Analysis and Predictive Maintenance models in subsequent phases, with edge deployed 5G as a capstone use cases for deployable AI.

The IRONCLAD SBIR changes the game for NAVWAR networking, connectivity, software, and AI/ML-enabling operations for the US Navy. Colvin Run Networks' commitment is anchored in delivering a future-proof application that serves immediate NAVWAR needs while establishing a solid foundation for Navy-wide adoption.