SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING COLLEGE OF DESIGN AND ENGINEERING

Website: https://cde.nus.edu.sg/ece

Area: Communications and Networks (CN)

Host: Prof Biplab Sikdar

TOPIC	:	GNN-based Swarm Attestation in IoT
SPEAKER	:	Mr Varun Kohli Graduate Student, ECE Dept, NUS
DATE	:	Thursday, 9 January 2025
TIME	:	9:00AM-10:00AM
VENUE	:	Join Zoom Meeting https://nus-sg.zoom.us/j/8092137897?pwd=eXFwV0s2SW14VFBzYW5GVXJtdUtvQT09 Meeting ID: 809 213 7897 Passcode: 405792

ABSTRACT

Resource-constrained IoT devices have paved their way into critical infrastructure to improve efficiency and quality of operations. Such devices are prone to malicious firmware updates and network attacks. Anomalous firmware and network attacks at one node may create downstream effects at other nodes. This seminar presents SwarmNet, a novel GNN-based swarm attestation framework for IoT swarms that uses the devices' SRAM contents and Graph Transformer networks to detect source and downstream anomalies.

BIOGRAPHY

Varun Kohli is a PhD student of the ECE Dept, NUS.

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