

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	:	Design vulnerabilities and attacks on Bluetooth and OCPP and how to fix them
SPEAKER	:	Prof Daniele Antonioli EURECOM, France
DATE	:	Monday, 27 April 2026
TIME	:	3:00PM-4:00PM
VENUE	:	E4-05-39 ECE Conference Room 4 Engineering Drive 3 Singapore 117583

ABSTRACT

This talk covers three recent research papers: BLERP: Bluetooth Low Energy Re-Pairing Attacks and Defenses; EmuOCPP: Effective and Scalable OCPP Security and Privacy Testing; and CheckOCPP: Automatic OCPP Packet Dissection and Compliance Check. The papers uncover security and privacy design flaws in the Bluetooth and OCPP standards and show how to exploit them to break the confidentiality, integrity, and authenticity of Bluetooth and OCPP. Then, they discuss ways to fix them directly in the standard or mitigate them with implementation-level defenses.

BIOGRAPHY

Daniele is an Assistant Professor (Class 1) at EURECOM with the software and system security (S3) group. He is doing research and teaching in system security and privacy with an emphasis on protocols, such as Bluetooth, FIDO2, and OCPP, embedded systems, such as vehicles, mobile, and IoT devices and cyber-physical systems such as industrial control systems.

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