



# Pietro Spadaccino

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## EDUCATION AND TRAINING

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2020 – 2023

**PHD - INFORMATION AND COMMUNICATION TECHNOLOGIES** Sapienza University of Rome

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Classification: excellent

2018 – 2020

**MASTER'S DEGREE - ENGINEERING IN COMPUTER SCIENCE** Sapienza University of Rome

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**Final grade** 110 cum laude | **Thesis** An Edge-Enabled Anomaly Detection Approach for IoT Environments

2015 – 2018

**BACHELOR'S DEGREE - INGEGNERIA INFORMATICA E AUTOMATICA** Sapienza University of Rome

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**Final grade** 110

## ADDITIONAL INFORMATION

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### PUBLICATIONS

**Challenges and Opportunities in LoRaWAN Security: Exploring Protocol Vulnerabilities, Privacy Threats and the Role of Edge Computing**

– 2024

P. Spadaccino, "Challenges and Opportunities in LoRaWAN Security: Exploring Protocol Vulnerabilities, Privacy Threats and the Role of Edge Computing", PhD thesis defended in 2024

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**Analysis and emulation of BGP hijacking events** – 2023

P. Spadaccino, S. Bruzzese, F. Cuomo, F. Luciani, "Analysis and emulation of BGP hijacking events", IEEE IPSN NOMS 2023

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**Privacy monitoring of LoRaWAN devices through traffic stream analysis** – 2022

F. Terenzi, P. Spadaccino, F. Cuomo, "Privacy monitoring of LoRaWAN devices through traffic stream analysis", IEEE WoWMoM 2022

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**LoRaWAN Behaviour Analysis through Dataset Traffic Investigation** – 2022

P. Spadaccino, F. G. Crinò, F. Cuomo, "LoRaWAN Behaviour Analysis through Dataset Traffic Investigation", MDPI Sensors 2022

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**Ruling Out IoT Devices in LoRaWAN** – 2022

P. Locatelli, P. Spadaccino, F. Cuomo, "Demo: Ruling Out IoT Devices in LoRaWAN", IEEE INFOCOM 2022

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**Intrusion Detection Systems for IoT: opportunities and challenges offered by Edge Computing** – 2022

Spadaccino, P., Cuomo, F., "Intrusion Detection Systems for IoT: opportunities and challenges offered by Edge Computing", ITU Journal on Future and Evolving Technologies, 2022

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**Discovery privacy threats via device de-anonymization in LoRaWAN** – 2022

Spadaccino, P., Garlisi, D., Cuomo, F., Pillon, G., Pisani, P., "Discovery privacy threats via device de-anonymization in LoRaWAN". Elsevier Computer Communications 2022

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**Hijacking Downlink Path Selection in LoRaWAN** – 2021

P. Locatelli, P. Spadaccino, F. Cuomo, "Hijacking Downlink Path Selection in LoRaWAN", IEEE Globecom 2021

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**Discovery privacy threats via device de-anonymization in LoRaWAN** – 2021

P. Spadaccino, D. Garlisi, F. Cuomo, G. Pillon, P. Pisani, "Discovery privacy threats via device de-anonymization in LoRaWAN", MedComNet 2021

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**Epidemic and Timer-Based Message Dissemination in VANETs: A Performance Comparison** – 2020

P. Spadaccino, F. Cuomo, A. Baiocchi, "Epidemic and Timer-Based Message Dissemination in VANETs: A Performance Comparison", IEEE Transactions on Intelligent Transportation Systems 2020

**EPIC: an Epidemic based dissemination algorithm for VANETs** – 2019

P. Spadaccino, P. Conti, E. Boninsegna, F. Cuomo, A. Baiocchi, "EPIC: an Epidemic based dissemination algorithm for VANETs", ACM MobiHoc 2019

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**RESEARCH ASSIGNMENTS**

2024 – 2025

**Strategie di monitoraggio delle reti abilitanti la progettazione di reti intelligenti e autonome**

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"Assegno di Ricerca" - Sapienza Università di Roma

03/2023 – 12/2023

**Integration of prototype for large-scale water-monitoring with ELEGANT platform and deployment in LoRaWAN testbed**

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Research activities on the EU project ELEGANT under contract of scientific collaboration and consulting by CNIT (National, Inter-University Consortium for Telecommunications)

2022 – 2023

**Border Gateway Protocol: vulnerabilità e validazione di tecniche di sicurezza in ambiente di emulazione basato su dati reali**

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"Avvio alla Ricerca" research project - Sapienza Università di Roma

11/2022 – 02/2023

**Analisi e sviluppo di servizi di data-driven per l'interpretazione di dati da sensori e gestione sicura di database**

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Research activities under "Incarico di Collaborazione Esterna" contract by Sapienza Università di Roma

2021 – 2022

**Intrusion Detection System based on Edge and Stream Computing for LoRaWAN**

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"Avvio alla Ricerca" research project - Sapienza Università di Roma

07/2021 – 12/2021

**Definizione ed implementazione di un sistema di Detection per IoT in modalità stream computing**

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Research activities under "Incarico di Collaborazione Esterna" contract by Sapienza Università di Roma

**OTHER COURSES**

2023 – 2023

**RESTART Tech Camp on 5G and O-RAN**

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Advanced course on architecture and infrastructure of 5G and O-RAN

2017 – 2018

**CyberChallenge**

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One of the 26 students selected among 700 requests to participate in the first edition of CyberChallenge cybersecurity course

**TEACHING**

2022 – CURRENT

**5G Postgraduate Academy**

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- Lectures for 5G academy post-graduate master program 2022 edition
- Lectures for 5G academy post-graduate master program 2023 edition

2021 – CURRENT

**Network Infrastructures**

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Practical tutorials for the course Network Infrastructures available for Master's Degrees in Computer Engineering, Ingegneria delle Comunicazioni, Artificial Intelligence and Robotics, Data Science and Cybersecurity for the academic years:

- 2021 / 2022
- 2022 / 2023
- 2023 / 2024

