

Research Interests:

Cyber security in wireless networks, Smart Attacks, Internet of Things (IoT), Internet of Everything (IoE), Optical Wireless Communications, Visible Light Communications (VLC), Reconfigurable Smart Environments (RSE), Vehicular (social) Networks, Intelligent Transportation Systems

CURRICULUM VITAE

Surname: Loscri'

Name: Valeria

Nationality: Italian

Address (phone/fax/e-mail): 119, Impasse Roger Bouvry – 59113, Seclin

Cell: +33 7 81 57 42 85, Email: valeria.loscri@inria.fr

Affiliation: Researcher Director (DR, equivalent Full Professor) at Inria Lille (FUN Team)

Office: +33 35 95 77 875

Education:

- (2018) Habilitation à diriger des recherches – HDR at University of Lille. Thesis Title: Toward Interoperability of Heterogeneous Self-organizing (smart) Things
- (2007) PhD at University of Calabria. Thesis Title: Protocols architecture for Wireless Networks: issues, perspectives and enhancements
- (2003) Master Thesis for Engineer in Computer Science. Thesis Title: Proposal of a multi-path routing algorithm over an E-TDMA MAC protocol to increase throughput and to reduce the delay in MANETs

Professional History:

- (Oct. 2024) Research Director at Inria Lille
- (October 2015 – Sept. 2024) Advanced researcher at Inria Lille
- (Oct. 2013 – Sept. 2015) Junior Researcher at Inria Lille
(Dec. 2006 – Sept. 2013) Research fellow and lecturer at University of Calabria

PROJECTS :

Projects as PI

-Scientific Chair and Grant Holder of COST action BEiNG-WISE (2023-2027)
(<https://www.cost.eu/actions/CA22104/#tabs+Name:Main%20Contacts%20and%20Leadership>): the main objective of BEiNG-WISE is to focus on the emerging wireless technologies and the associated vulnerabilities to propose a drastic paradigm shift, by considering human-being in the loop and conceive new and more effective cyber-security solutions. (2023-2027)

-CORTESE (2022-2025): CO-existence of wireless Technologies for SEcurity intelligent networks, grant of Hauts-de France Region.

Consortium: University Polytechnic of Valenciennes, University of Gustave Eiffel, Transalley

-Exploratory Action (2019-2022) ETHICAM Emerging Technologies for new Communication paradigMs, funded by Inria (<https://project.inria.fr/ethicam/>, <https://www.inria.fr/en/inrias-exploratory-actions-taking-risks>), Communication paradigms based on the control and reprogrammability of the environment by the means of Reprogrammable Intelligent Metasurfaces

-Exploratory Action (2019-2021): LumiCar with UGE, funded by the Region Hauts de France (<https://project.inria.fr/lumicar/>), Communication Paradigms based on Visible Light Communication (VLC)

Projects as local PI:

-MLSysOps: (2023 - 2026), Coordinator: University of Thessalias; MLSysOps is a HORIZON-RIA project in the call HORIZON-CL4-2022-DATA-01. The main objective is to implement and evaluate a complete framework for autonomic end-to-end system management across the full cloud-edge continuum.

-DEPOSIA: (2022-2025), Coordinator: UGE (France); DEPOSIA is an ANR - ASTRID Artificial Intelligence project. The main objective is to work on the characterization of the environment from an electromagnetic point of view in order to improve the detection and enable the geo-localisation of cyber-attacks in wireless networks (<https://cybcom.univ-gustave-eiffel.fr/projets/deposia/>)

-NEWFOCUS: (2021-2025), Coordinator: Ecole Centrale Marseille; NEWFOCUS is a COST-Action European Project. The main objective is to work on radical solutions based on Optical Wireless Communications (OWC) for Beyond-5G (B5G) networks (<https://www.newfocus-cost.eu/>).

-GLOCAT: (2021-2023): Coordinator: UGE (France); GLOCAT is a Regional Grant project (Dispositif STIMule - Volet Partenarial). The main objective is the geolocalisation of cyber-attacks and cyber attackers in wireless networks. (<https://cybcom.univ-gustave-eiffel.fr/projets/glocat/>)

Projects as member

-H2020 CyberSANE (2019-2022) (<https://cordis.europa.eu/project/rcn/224790/factsheet/en>)

(Current) Supervision of Research Activities

PhD Students (Only more recent)

- Lucien DIKLA** (Oct. 2024); Lucien will work on an ANR project NEMIoT, on the security aspects of the IoT devices based on a cross-layer, i.e., physical layer and protocol level approach.
- Aymen BOUFFEROU** (Oct. 2023): Aymen will work at the PEPR 5G project, for Trust and Secure 6G wireless communication technology (co-supervision with Abderrahim Benslimane, University of Avignon)
- Jiali XU** (March 2023): Jiali will work in the context of MLSysOps project for resource allocation and anomaly detection in wireless IoT-EDGE continuum systems (co-supervision with Romain Rouvoy, SPIRALS Team)
- Ildi ALLA** (Oct. 22): Ildi's work will focus on detection and countermeasure of illicit wireless devices in wireless communication networks, in the context of the MLSysOps project (100% supervision).
- Selina CHEGGOUR** (Oct. 22): Selina's work will focus on Energy efficient and intelligent 5G massive MIMO solutions based on machine-learning for Vehicular communications (50% supervision)
- Carola RIZZA** (Oct.19): Carola's work is focusing on interactions of optical and high frequency waves with meta-material for designing new communication paradigms in the context of ETHICAM (100% supervision)
- Meysam MAYAHI** (Oct.19) Meysam's work is focusing on Visible Light Communication for inter and intra -vehicular communication (CORDIS) (100% supervision)
- Emilie BOUT** (Oct.19) DGA and Inria Thesis. Emilie's work is focusing on Attacks on IoT systems and learning approaches for making the wireless networks more robust (50% supervision)
- Edward STADDON** (Oct.19) Edward's work is focusing on the attacks on wireless systems (in the context of H2020 European Project CyberSANE) (50% supervision)

PostDocs (Only more recent)

- Selma YAHIA** (Aug. 2023 – Aug. 2025) CORTESE project, to develop cross network communication technologies filling emerging vulnerabilities and threats (co-supervision with Virginie Deniau and Christophe Gransart – University of Gustave Eiffel).
- Aya MOHEDDINE** (July 2023 – Jan. 2025) MLSysOps project, Aya will work on resource allocation and anomaly detection in wireless IoT-EDGE continuum systems
- Nassima MERABTINE** (March 2022 – Feb. 23) DEPOSIA Project, Nassima will work on the detection of cyber-attacks based on Machine Learning approaches and the implementation of a complex simulation tool for identification of attacks on drones in a wireless context.

Engineers (Only more recent)

- Prakriti SAXENA** (May 2022 - Aug. 2023), Prakriti will work on a synchronization approach in Visible Light Communication context. She will also focus on coexistence of different communication technologies to face cyber-attacks as MitM and Jamming in vehicular contexts.

Others:

Scientific Expertise:

- Appointed as Chair of the expert panel for fundamental research W&T5 Computer Science & Information Technology FWO (Brussels).
- Expertise for i-Trans on 6G projects
- Evaluator Expert for HORIZON-JU-SNS-2023, 6G projects and HORIZON-JU-KDT
- FWO Expert Panel for the Fundamental Research Panel W&T5 PhD and Postdoc;

Panelist in the

- Standardization for UAVs and Drones at CSCN 2021 (<https://cscn2021.ieee-cscn.org/program/panels/>)
- Special Session "New Trends in Communication" at IEEE ACM Nanocom 2018 (Iceland);
- Panel "Inspirations from wireless networks to biology" for the FET EU MolCom workshop (2018)

Responsibilities for Inria:

- Since May 2019 I am Scientific Delegate for International partnerships at Inria Lille.
- September 2016 - May 2019, I have been Scientific Delegate for European partnerships for Inria Lille – Nord Europe.
- Since Sept. 2015 till December 2018, I have been member of the committee for Inria Lille of Technological Transfer Development (CDT).

Awards

- Nominated as part of the 100 Brilliant and Inspiring Women in 6G—List for 2025 (<https://medium.com/@womenin6g/announcing-the-100-brilliant-and-inspiring-women-in-6g-list-for-2025-7115d8c8a9ce>)
- Shortlisted as Cyber Researcher by European Women Cyber Day - ECWD in 2024
- Nomination to the 2021 N2Women: Stars in Computer Networking and Communications
- Best Paper Award of "A Thompson Sampling approach to channel exploration-exploitation problem in multihop cognitive radio networks", in IEEE PIMRC 2016.