



Matteo Pagin

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Website: <https://github.com/pagmatt>

Gender: Male **Date of birth:** 10/08/1996 **Nationality:** Italian

WORK EXPERIENCE

[30/11/2020 – 30/09/2021] **Postgraduate researcher**

SIGNET Lab, DEI, Università degli studi di Padova

City: Padova

Country: Italy

Main activities and responsibilities:

I mainly worked on a joint project with Orange called “5G NR-Light Challenges and Key Enablers in the Millimeter Wave Band”, which targeted the identification of promising solutions for NR-Light. During the last part of this experience I also worked on the system-level analysis and the design of algorithms for Smart Electromagnetic environments, in collaboration with Huawei Milan. Throughout this whole period I also worked on the general development of the *mmWave* ns-3 module.

[29/02/2020 – 30/05/2020] **Research engineer internship**

SIGNET Lab, DEI, Università degli studi di Padova

City: Padova

Country: Italy

Main activities and responsibilities:

I worked on the development of the *mmWave* module for the open-source network simulator ns-3. Specifically, I developed a new radio frame structure, which is now fully compliant with the Rel. 16 3GPP NR specifications, and I updated the PHY and MAC layers implementations to properly reflect these changes.

EDUCATION AND TRAINING

[01/10/2021 – Current] **PhD Student in Information Engineering**

University of Padova

Address: Italy

[09/2018 – 10/2020] **Master Degree in ICT for Internet and Multimedia, curriculum Cybersystems**

Università degli studi di Padova, Italy

Address: Padova, Italy

Final grade: 110L/110, GPA 29.92

[09/2015 – 09/2018] **Bachelor Degree in Ingegneria dell'Informazione**

Università degli studi di Padova, Italy

Address: Padova, Italy

Final grade: 106/110, GPA 26.72

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

DIGITAL SKILLS

My Digital Skills

Python | C++ | Basic knowledge of Bash | Basic knowledge of Java | LaTeX | Network simulator ns-3 and its mmWave module | Octave/MATLAB | Git | Linux

HONOURS AND AWARDS

[18/06/2020] **Mario Gerla Best Paper Award** **Awarding institution:** 2020 IEEE Mediterranean Communication and Computer Networking Conference

PUBLICATIONS

[2022]

[Accepted at the Medcomnet 2022 conference] End-to-End Simulation of 5G Networks Assisted by IRS and AF Relays

<https://arxiv.org/abs/2203.01209>

Pagin, Matteo, Marco Giordani, Amir Ashtari Gargari, Alberto Rech, Federico Moretto, Stefano Tomasin, Jonathan Gambini, and Michele Zorzi. "End-to-End Simulation of 5G Networks Assisted by IRS and AF Relays.", *to be presented at Medcomnet 2022*

[2021]

Resource Management for 5G NR Integrated Access and Backhaul: a Semi-centralized Approach

<https://ieeexplore.ieee.org/abstract/document/9500058>

Matteo Pagin, Tommaso Zugno, Michele Polese and Michele Zorzi "Resource Management for 5G NR Integrated Access and Backhaul: a Semi-centralized Approach", February 2021, IEEE Transactions on Wireless Communications.

[2020]

Enabling RAN Slicing Through Carrier Aggregation in mmWave Cellular Networks

<https://ieeexplore.ieee.org/document/9191462>

Matteo Pagin, Francesco Agostini, Tommaso Zugno, Michele Polese and Michele Zorzi "Enabling RAN Slicing Through Carrier Aggregation in mmWave Cellular Networks", June 2020, 2020 Mediterranean Communication and Computer Networking Conference

Cars: B