Mikko Juho-Matti Majamaa   **CV**
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https://orcid.org/0000-0003-0916-7563   Nov. 2023

EDUCATION

Aug. 2022 –

Ph.D. (Tech.), University of Jyväskylä
"Enhancing Communication Performance in 5G and Beyond Non-Terrestrial Networks"
- Supervisors: Prof. Timo Hämäläinen, Dr. Jani Puttonen.

Sep. 2020 – May 2022

Master of Science, LUT University
Computational Engineering and Technical Physics
- Technical mathematics as a major, data science and engineering as a minor
- Grade: 4.22/5.0.

Sep. 2020 – July 20021

Exchange studies, Instituto Superior Técnico
Mathematics and Applications
- Performed courses in applied mathematics and minor in data science and engineering.

Sep. 2017 – May 2020

Bachelor of Science, LUT University
Computational Engineering and Data Analytics
- Technical mathematics as a major, IT as a minor
- Grade: 4.36/5.0.

WORK EXPERIENCE

Oct. 2023 –

Senior Researcher, Magister Solutions Oy
- Satellite communications research, consultancy, and increased responsibility on the project management side

June 2022 – Sept. 2023

Researcher, Magister Solutions Oy
- Did satellite communications research.
- Worked as a consultant on projects related to wireless communication.

Jan. 2021 – June 2022,
Jan. 2020 – Aug. 2020

Software developer, Magister Solutions Oy
- Did R&D of satellite communication simulators (ns-3, C++, Python, CUDA)
- Developed a SaaS product (MEAN stack)
- Participated in research projects that included publication of scientific papers in the field of satellite communications.

May 2019 – Dec. 2019

Software developer, Silmu Software Oy
- Developed web and mobile software (Ruby, JS)
- Worked with the company's own SaaS products and as a consultant in customer projects, also working at the customer interface.

Jan. 2019 – May 2019

Software developer trainee, Silmu Software Oy
- Developed web and mobile software (Ruby, JS).

PUBLICATIONS

- **M. Majamaa,** H. Martikainen, J. Puttonen and T. Hämäläinen, "On Enhancing Reliability in B5G NTNs with Packet Duplication via Multi-Connectivity," 2023 IEEE International Conference on Wireless for Space and Extreme Environments (WiSEE).
- **M. Majamaa**, H. Martikainen, J. Puttonen and T. Hämäläinen, "Satellite-Assisted Multi-Connectivity in Beyond 5G," 2023 IEEE 24th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), Boston, MA, USA, 2023, pp. 413-418, doi: 10.1109/WoWMoM57956.2023.00073.
- H. Martikainen, **M. Majamaa** and J. Puttonen, "Coordinated Dynamic Spectrum Sharing Between Terrestrial and Non-Terrestrial Networks in 5G and Beyond," 2023 IEEE 24th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), Boston, MA, USA, 2023, pp. 419-424, doi: 10.1109/WoWMoM57956.2023.00074.
- **M. Majamaa**, H. Martikainen, L. Sormunen and J. Puttonen, "Multi-Connectivity in 5G and Beyond Non-Terrestrial Networks," in Journal of Communications Software and Systems, vol. 18, no. 4, pp. 350-358, December 2022, doi: 10.24138/jcomss-2022-0155

- **M. Majamaa**, H. Martikainen, L. Sormunen and J. Puttonen, "Multi-Connectivity for User Throughput Enhancement in 5G Non-Terrestrial Networks," 2022 18th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), Thessaloniki, Greece, 2022, pp. 412-418, doi: 10.1109/WiMob55322.2022.9941510
- **M. Majamaa**, H. Martikainen, L. Sormunen and J. Puttonen, "Adaptive Multi-Connectivity Activation for Throughput Enhancement in 5G and Beyond Non-Terrestrial Networks," 2022 International Conference on Software, Telecommunications and Computer Networks (SoftCOM), Split, Croatia, 2022, pp. 1-5, doi: 10.23919/SoftCOM55329.2022.9911400
- **M. Majamaa**, J. Kurjenniemi, L. Sormunen and J. Puttonen, "Usage of GPGPU Computing in LEO Satellite Network Simulations", Ka and Broadband Communications Conference, Arlington, USA, 2021.
- A. Masri, J. Kurjenniemi, J. Puttonen, T. Varjus and **M. Majamaa**, "Capacity Level Simulator for NGSO Satellite Constellations", Ka and Broadband Communications Conference, Arlington, USA, 2021.

PUBLICATIONS UNDER PROGRESS
- **M. Majamaa**, "Multi-Connectivity in Beyond 5G Non-Terrestrial Networks: Challenges and Insights," IEEE Communications Magazine, 2023. (Submitted)

LANGUAGE SKILLS

- Finnish   C2 (native)
- English   C1
- Portuguese   B2
- Swedish   A1

TEACHING EXPERIENCE
- Was an assistant in a university course focused on numerical methods.

AWARDS, HONOURS, AND GRANTS

Oct. 2023	**Working grant to perform a research visit of 3 months to the University of Luxembourg (€7500), Wihuri Foundation**
June 2023	**Grant for internationalization (€1150), Riitta and Jorma J. Takanen Foundation**
Nov. 2022	**Young Scholar Recognition, Communications, Space & Technology of Saudi Arabia** • Awarded for the article "Adaptive Multi-Connectivity Activation for Throughput Enhancement in 5G and Beyond Non-Terrestrial Networks".
May 2022	**Stipend for graduating in the target time, LUT University**
June 2020	**Stipend for good performance in undergraduate studies (average grade 4.36/5.0), LUT University**
Nov. 2019	**Stipend for good performance in studies (€1000), Research Foundation of Lappeenranta University of Technology**
April 2018	**First place (as a group) in a competition of collecting credits for first-year university students, LUT University**

OTHER

April 2022 –	**Deputy workers' representative, Magister Solutions Oy**
Jan. 2019 – Dec. 2019	**Sports manager, Lateksii Ry** • Volunteered as a sports manager in the quild for students of computational engineering.

IT SKILLS

- IT skills include but are not limited to C++, C, CUDA, Java, JavaScript (e.g., React, Vue, Angular, ExpressJS, NodeJS, Ionic…), Python, Ruby, HTML, SQL, MongoDB, Git, MATLAB, R, and Linux.