



Contact

Phone

+358417483828

Email

mounssif.krouka@oulu.fi

Website

<https://mounssifkrouka.netlify.app/>

Education

2019 - Current

Doctor of Science in Technology
University of Oulu, Finland

2016 - 2018

Master of Science in Wireless Communications Engineering
University of Oulu, Finland

2012 - 2015

Bachelor of Science in Electrical and Electronics Engineering
University of Boumerdes, Algeria

Skills

- PYTHON (Pytorch/TF)
- MATLAB / C
- Algorithm design for Digital/Analog communications
- Collaborative work

Expertise

- ML/AI for Communications
- Communications for ML/AI
- Radio Resource Management
- LTE, NR, and 6G standards

Mounssif Krouka

Doctoral Researcher in Wireless Communications

I am an experienced research engineer with a background in wireless communications, signal processing, and machine learning. I am currently Finalizing my doctoral studies at the Centre for Wireless Communications (CWC), at university of Oulu, Finland . I collaborate and communicate with experts in academia and industry on several research projects focusing on the next generation of wireless systems (5G and beyond).

Experience

2019 - Present

Centre for Wireless Communications (CWC), University of Oulu
Doctoral Researcher

- **Doctoral thesis topic: Communication- and Energy-Efficient Algorithms for Edge Artificial Intelligence.**
- Research Focus: Distributed Optimization, Communication and Energy-efficient systems, Learn to Communicate / Communicate to Learn.
- I led the EU's Horizon Europe project "**ADROIT6G**" from Jan - June 2023 before joining Nokia Bell Labs

2023 (June - December)

Nokia Bell Labs, Espoo, Finland
Machine Learning Research Intern

- I worked on the intersection of Communication-Efficient Federated learning and Differential Privacy.
- Submitted a conference paper
- Submitted a Patent application

2022 (May - August)

Qualcomm, Espoo, Finland
Modem Systems Engineering Intern

- Research topic: Artificial Intelligence based CSI Feedback in massive MIMO
- Contributed to the development of 5G and beyond physical layer modem systems.
- Evaluated the use of Artificial Intelligence (AI)/Machine Learning (ML) methods for physical layer signal processing in wireless communications.
- Performed theoretical analysis and algorithm simulation.
- Presented and documented the outputs of the research results.

Achievements

- SNS JU 6G Project "ADROIT6G" **Lead** (Jan 2023 - June 2023)
- **Patent filed with Nokia (Dec 2023)**
- **Encouragement Grants:**
 - Nokia Foundation Scholarship 2023
 - University of Oulu Scholarship Grant 2022

References

Mehdi Bennis, Professor at University of Oulu



mehdi.bennis@oulu.fi