Ilari Angervuori

Curriculum Vitae

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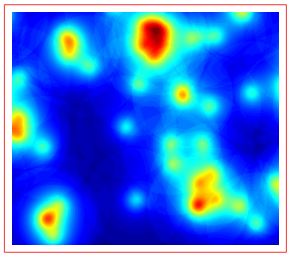
please find my GitHub and SoundCloud in the link.



A Brief Cover Letter

I am a researcher in signal processing with a recent PhD (thesis is in pre-examination), and I am ready for new challenges. With a strong academic research background, I am determined to contribute to the industry and to practical-level problem-solving in low Earth orbit communications. I am inspired by ambitious thinkers and producers who are not afraid even of non-orthodoxy. I have a genuine aspiration for a bright, equal, and united future in Europe and the World, in which communication systems have an essential part: Freedom, honesty, and love.

Work Experience

5/2025-9/2025 **Project Researcher**, *Aalto University*, Department of Electrical Engineering, Espoo, Finland
- Managed an R&D research article project [7] through on-campus collaboration.

8/2023-2/2024 **Visiting Researcher**, *University of Notre Dame*, Department of Electrical Engineering, South Bend, Indiana, US
- Served as the corresponding author in an R&D article project [1]: coordinated co-authors, managed journal submission, responded to reviewers, and oversaw revisions to acceptance.

05/2019-05/2025 **PhD Candidate**, *Aalto University*, Signal Processing of Wireless Networks, Espoo, Finland
- Conceived, designed, and implemented a personal R&D plan.
- Reviewed and refined R&D article projects and other production with collaborations [1-8].
- Supervised a bachelor's thesis.
- Applied for multiple competitive grants and secured funding.
- Delivered oral presentations at conferences [2], [6].

11/2018-5/2019 **Research Assistant**, *Aalto University*, Department of Signal Processing and Acoustics, Espoo, Finland
- Co-developed a structured R&D plan with the supervising professor, defining objectives, methodology, and milestones.

Education

2025 **Doctor of Science (PhD) (thesis in pre-examination)**, *Aalto University*, Department of Electrical Engineering, Signal Processing for Communications
- Stochastic Geometry and Low Earth Orbit (LEO) Communications.

2018 **Master of Philosophy (MSc)**, *University of Helsinki*, Department of Mathematics and Statistics, Applied Analysis
- Partial Differential Equations, Finite Element Method (FEM).

2016 **Bachelor of Science (BSc)**, *University of Helsinki*, Applied Analysis
- Optimal Control Theory.

Peer-Reviewed Publications

2025 **[1] Meta Distribution of the SIR in a Narrow-Beam LEO Uplink**, *IEEE Transactions on Communications*, I. Angervuori, M. Haenggi and R. Wichman

2022 **[2] A Closed-Form Approximation of the SIR Distribution in a LEO Uplink Channel** , *IEEE Globecom: Workshop on Cellular UAV and Satellite Communications, Rio De Janeiro*, I. Angervuori and R. Wichman, Oral Presentation

2020 **[3] Downlink Coverage and Rate Analysis of Low Earth Orbit Satellite Constellations Using Stochastic Geometry**, *IEEE Transactions on Communications*, N. Okati, T. Riihonen, D. Korpi, I. Angervuori and R. Wichman

2020 **[4] Theoretical and Simulation-based Analysis of Terrestrial Interference to LEO Satellite Uplinks, Taipei, Taiwan**, *GLOBECOM Global Communications Conference, Taipei*, A. Yastrebova, I. Angervuori, Niloofar Okati, et al.

2019 **[5] Performance Evaluation of Low Earth Orbit Communication Satellites**, *Proceedings of XXXV Finnish URSI Convention on Radio Science*, N. Okati, I. Tanash, T. Riihonen, I. Angervuori and R. Wichman

2019 **[6] On Routing Protocols in Inter-Satellite Communications**, *Proceedings of XXXV Finnish URSI Convention on Radio Science*, I. Angervuori, R. Wichman, N. Okati and T. Riihonen, Oral Presentation

Preprints

2025 **[7] Spatial and Temporal Correlation of the Interference in a Narrow-Beam LEO Network with ALOHA Medium Access Control**, *TechRxiv, submitted to IEEE Communications Letters*, I. Angervuori, A. Afridi and R. Wichman

2025 **[8] Order Statistics of the SIR and Interference Cancellation in a Narrow-Beam LEO Uplink**, *TechRxiv, submitted to IEEE Communications Letters*, I. Angervuori and R. Wichman

Computer Skills

Beginner C++

Intermediate JAVA, PYTHON,C, Audio Signal Processing

Advanced OCTAVE, MATLAB, MATHEMATICA, LaTeX, Linux Operating System

Languages

Native Finnish

Excellent English

Others Swedish, Spanish

Recognitions

2024 **Peer Reviewer Certificate**, IEEE Transactions, Mobile Computing

References

- Prof. Martin Haenggi, University of Notre Dame, mhaenggi@nd.edu
- Prof. Risto Wichman, Aalto University, risto.wichman@aalto.fi