

llari Angervuori

Curriculum Vitae

A Brief Cover Letter

A researcher in signal processing with a fresh PhD (will be officially graduating within months). With a strong Academic background, I am determined to contribute to the industry and to more practical-level problem-solving. Not afraid of creativity and even non-orthodoxy, while being also capable of applying existing solutions to a new context. My research has focused on Low Earth Orbit (LEO) communications. For example, the most recent work explored the interference correlation properties in the LEO networks. Further, I have broad expertise particularly in mathematical signal processing.

Work experience

1.5.-1.9.2025 **Project Researcher**, *Aalto University*, Department of Electrical Engineering, Espoo, Finland

1.8.2023- Visiting Researcher, University of Notre Dame, Department of Electrical Engineer-

1.2.2024 ing, South Bend, Indiana, US

1.5.2019- PhD Candidate, Aalto University, Signal Processing of Wireless Networks, Espoo,

1.5.2025 Finland

2018- Research Assistant, Aalto University, Department of Signal Processing and Acous-

1.5.2019 tics, Espoo, Finland

Education

2025 Doctor of Science (PhD), Aalto University, Department of Electrical Engineering, Signal Processing

LEO network system-level modeling

2018 **Master of Philosophy (MSc)**, *University of Helsinki*, Department of Mathematics and Statistics, Applied Analysis

Partial Differential Equations, Finite Element Method

2016 **Bachelor of Science**, *University of Helsinki*, Applied Analysis Optimal Control Theory

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Peer-reviewed publications

- 2025 Meta Distribution of the SIR in a Narrow-Beam LEO Uplink, IEEE Transactions on Communications, I. Angervuori, M. Haenggi and R. Wichman
- 2022 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 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 Theoretical and Simulation-based Analysis of Terrestrial Interference to LEO Satellite Uplinks, Taipei, Taiwan, GLOBECOM Global Communications Conference, Taipei, A. Yastrebova et al.
- 2019 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 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 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 and A. Afridi
- 2025 Order Statistics of the SIR and Interference Cancellation in a Narrow-Beam LEO Uplink, *TechRxiv*, I. Angervuori and R. Wichman

Computer skills

Knowledgeable JAVA, PYTHON, C, Audio Signal Processing

Advanced Octave, Matlab, Mathematica, Linux Operating System

Languages

Mothertongue Finnish

Fluent English

Others Swedish, Spanish

Recognitions

2024 Peer Reviewer Certificate, IEEE Transactions, Mobile Computing

Interests

• Reading and writing

Listening to music and playing music

Ilari Angervuori