

JULIA KOSTIN

EDUCATION

Technical University of Munich

TopMath: Elite Master's and Doctoral Programme in Mathematics (1.06/1.00)

Master's thesis: Robustness Guarantees for Low-rank Matrix Recovery with Adversarial Noise

Oct 2020 - Mar 2023

Ludwig Maximilian University of Munich

BSc Mathematics (1.01/1.00)

Bachelor thesis: Construction of Orthonormal Wavelet Systems (with Prof. Peter Müller)

Oct 2017 - Aug 2020

BSc Biology

Oct 2016 - Oct 2017

PROFESSIONAL EXPERIENCE

Technical University of Munich

Research Assistant

• Part of the DFG-funded Priority Program **Theoretical Foundations of Deep Learning (FoDL)** and the **Munich Center for Machine Learning (MCML)**

Munich, Germany

Jul 2022 - Present

Fraunhofer Institute for Integrated Circuits IIS

Student Researcher

• Worked on neural network models for speech extraction, implemented EEG-driven classifiers of talker identity and speech direction

Erlangen, Germany

Nov 2020 - Jun 2022

LMU Mathematical Institute

Tutor in Advanced Calculus, Measure Theory and Integration

Munich, Germany

Apr 2019 - Aug 2020

Bernstein Center for Computational Neuroscience

Student Researcher

Munich, Germany

Sep 2017 - Oct 2018

PUBLICATIONS

Preprints

• Julia Kostin, Felix Kraemer, Dominik Stöger. *"How robust is randomized blind deconvolution via nuclear norm minimization against adversarial noise?"*. 2023. [Submitted]

• Mohamed Elminshawi, Julia Kostina, Neeraj Kumar Sharma, and Emanuël Habets. *"Attended Talker Decoding Exclusively From Listening-State EEG"*. 2022. [Submitted]

CONFERENCE TALKS AND POSTERS

KU-LMU-TUM Joint Seminar on Mathematics of Data Science

• "Robustness Guarantees for Blind Deconvolution via Nuclear Norm Minimization"

Nov 2022

Approximation and Geometry in High Dimensions 2022

• "Robustness Guarantees for Low-rank Matrix Recovery with Adversarial Noise"

Oct 2022

Bernstein Conference for Computational Neuroscience 2018

• "Differentiating Temporal Aspects of Grid-Cell Activity with Generalized Linear Models"

Sep 2018

2017 Amgen Scholars Europe Symposium

• "Exploring Grid Cell Spiking with a Generalized Linear Model"

Sep 2017

AWARDS

Max Weber Scholarship for gifted students

Apr 2018 - present

SKILLS

Programming languages Python, MATLAB, R, C++
Languages German, English, Russian