

David Schmotz

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Education

University of Cambridge - Part III MAST Mathematics (2023 - 2024) - Honours

- Courses: Modern Statistical Methods, Concentration Inequalities, Convex Optimisation, Information Theory, Statistical Learning in Practice, Advanced Probability.
- Thesis on „Differentially Private Synthetic Data“ with Prof. Dr. Po-Ling Loh.

University of Göttingen - BSc Mathematics (2020 - 2023) - 1.5

- Courses include: Numerical analysis and linear algebra, Measure and Probability Theory, Stochastics, Statistical Foundations of Data Science, Optimization.
- Thesis on „Conjectures on Empirical Optimal Transport and their Numerical Assessment“.

University of Göttingen - BSc Applied Computer Science (2018 - 2023) - 1.5

- Courses include: Advanced topics on algorithms and data structures, Theoretical Computer Science, Scientific computing, Mathematics related programming, Statistical Data Science, Deep Learning.

ETH Zürich - Visiting Student in Mathematics (2022)

- Graph Theory, Mathematics of Machine Learning, Topology.

Experience

Student Researcher - Deep Learning for NLP - at University of Göttingen (May 2025 -)

- Teaching and research assistant in Deep Learning for NLP.

Stephan Hell fellowship - Max-Planck-Institute for Multidisciplinary Sciences in Göttingen (Oct 2024 - March 2025)

- Research in the lab of Dr. Johannes Söding on a faster overlap-based genome assembler for metagenomic data that uses a Bayesian statistical model to select extensions, clustering and a novel algorithm to detect repeats in genomes (Python and C++).

Teaching Assistant - University of Göttingen (2019-2020, 2022 - 2023)

- Held exercise sessions and graded students homework in the first-year courses „Computer Science 1“ and „Discrete mathematics“.

Working Student - German Aerospace Center Göttingen (2020 - 2021)

- Research potential speed advantages using the GPU capabilities of the NVIDIA Jetson Xavier at Stochastic Subspace Identification. (Python, PyTorch, C and Matlab).

Intern and Working Student - ESE GmbH - Hannover (2018, 2019)

- Working on Client projects in PHP and C#. Development of an internal accounting tool with React.

Volunteer - SNNTG e.V. - Hannover (2019)

- Developing iOS+Android App, the CMS and REST API (Swift, Java, React and Node.js).

Co-Founder Fahrpreiserstattung.de (2017 - 2018)

- Startup to automate refund applications for delays of Deutsche Bahn trains (PHP and Angular.js).

Scholarships

Stephan Hell Fellowship - 2024 - 2025

Deutschlandstipendium - 2020

Lower Saxony scholarship - 2020, 2021

