

Elias HEINEMANN



PROFILE

I am a mathematics master's student with strong interests in Partial Differential Equations, Probability Theory, Data Science, Numerical Analysis and much more. My background in mathematics and computer science allows me to work with abstract concepts while developing practical, algorithmic, and numerical solutions.

CONTACT DETAILS

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✉ Kleeweg 10, 85375 Neufahrn bei Freising, DE

LANGUAGES

German (native)
English (C1)
French (B2)

SKILLS

- Partial Differential Equation - Theory and Numerical approach
- Probability Theory - Stochastic Calculus, Large Deviations
- Python, R, Java, Matlab

EDUCATION

- MASTER OF SCIENCE MATHEMATICS** **2023–pres.**
Technical University of Munich
◊ Erasmus Semester: *Université Grenoble Alpes (France)*
◊ Final Grade: 1.0
- BACHELOR OF SCIENCE MATHEMATICS** **2019–2023**
Technical University of Munich
◊ Minor: *Computer Science*
◊ Final Grade: 1.3

EXPERIENCE

- TUTOR - PROBABILITY THEORY** **WiSe 24/25**
Technical University of Munich
◊ Giving a tutorial class. Supervising students and presenting solutions at the end of the session. Grading the homework.
- WORKING STUDENT — INDUSTRIAL IMAGE PROCESSING** **WiSe 22/23**
MVTec GmbH, Munich
◊ Working with LLMs to do You Only Look Once (YOLO) detection for object counting
- TUTOR — ALGORITHMS AND DATA STRUCTURES** **SoSe 22**
Technical University of Munich
◊ Giving a tutorial class. Supervising students and presenting solutions at the end of the session
- CORRECTOR FOR ANALYSIS 1** **WiSe 21/22**
Technical University of Munich
◊ Grading homework of the fundamental course Analysis 1 for first semester students
- SUMMER ACADEMIE** **Summer 2019**
QUANTUM ALGORITHMS & QUANTUM COMPUTING
Joint Cooperation TUM, FAU, University of Stuttgart
◊ Talk on the Bell paradox, Developing a quantum game

PROJECTS

- HACKATUM** **2023**
Technichal University Munich
◊ Hackaton implementing trading strategies on a simulated market, group project
- JUGEND FORSCHT** **2019**
Stiftung Jugend forscht e. V.
◊ Using a CNN to identify sign language from a video source, group project

HOBBIES

Sport: Avid climber, bouldering a few times a week is a must. Outside when the time allows.

Music: Discovering all the beautiful music genres out there. Dabbling with the piano from time to time.