Jonathan Hellwig

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jonathan-hellwig.github.io

PROFILE

As an industrial mathematics graduate with a deep interest in robotics and machine learning, I am eager to work and innovate on real-world systems. My experiences demonstrate my enthusiasm to embrace new topics applying my mathematical background.

SKILLS

Machine learning with PyTorch
Image classification, object detection and reinforcement learning

Sensor fusion
Processing of noisy measurements in a real-time system

Optimization on real-world systems
Calculation of optimal transformation of noisy image detection lines

TECHNICAL

Languages Python, Rust, R

EXPERIENCE

Member of Robocup SPL team HULKs
HULKs e.V.
Localization, object detection, sensor fusion
Participation in the RoboCup 2021, Thailand

Jun **2021** - Present
Hamburg, Germany

Group tutor for Numerical methods in geosciences
University of Hamburg

Apr **2022** - Sep **2022**
Hamburg, Germany

Research assistant for Prof. Dr. Jörn Behrens
University of Hamburg
Shallow water wave simulation

Jan **2022** - Jun **2022**
Hamburg, Germany

Internship at actuarial department
SIGNAL IDUNA
Estimation of loss reserves

Feb **2021**
Hamburg, Germany

Group tutor for Optimization
University of Lübeck

Apr **2019** - Sep **2019**
Lübeck, Germany

Group tutor for Linear Algebra
University of Lübeck

Oct **2017** - Sep **2019**
Lübeck, Germany

EDUCATION

Industrial mathematics (M.Sc.)
University of Hamburg
Thesis topic: Relations between variants of stochastic gradient descent and stochastic differential equations
Average grade: 1.3

Oct **2020** - Feb **2023**
Hamburg, Germany

Computational Life Science (B.Sc.)
Universität zu Lübeck
Award for best graduate 2019
Thesis topic: Multilevel Monte Carlo methods for stochastic differential equations
Average grade: 1.3

Oct **2016** - Sep **2019**
Lübeck, Germany