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Jonathan Hellwig

PROFILE

As an industrial mathematics graduate of with a deep interest in robotics and machine learning, I am eager to work and innovate on real-world systems. My past 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 — Jun **2021** - Present
HULKs e.V. — Hamburg, Germany
Localization, object detection, sensor fusion
Participation in the RoboCup 2021, Thailand

Research assistant for Prof. Dr. Jörn Behrens — Jan **2022** - Jun **2022**
University of Hamburg — Hamburg, Germany
Shallow water wave simulation

Internship at actuarial department — Feb **2021**
SIGNAL IDUNA — Hamburg, Germany
Estimation of loss reserves

Group tutor for Optimization — Apr **2019** - Sep **2019**
University of Lübeck — Lübeck, Germany

Group tutor for Linear Algebra — Oct **2017** - Sep **2019**
University of Lübeck — Lübeck, Germany

EDUCATION

Industrial mathematics (M.Sc.) — Oct **2020** - Feb **2023**
University of Hamburg — Hamburg, Germany
Thesis topic: Relations between variants of stochatic gradient descent and stochastic differential equations
Average grade: 1.3

Computational Life Science (B.Sc.) — Oct **2016** - Sep **2019**
Universität zu Lübeck — Lübeck, Germany
Award for best graduate 2019
Thesis topic: Multilevel Monte Carlo methods for stochastic differential equations
Average grade: 1.3