

Hellwig Jonathan

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

Jun 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

Advisor: Dr. Jens-Peter Zemke

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 simulations

Advisor: Prof. Dr. Andreas Rößler

Average grade: 1.3

Oct 2016 - Sep 2019

[Lübeck, Germany](#)