Paul Schulte

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EDUCATION

RWTH Aachen University

Oct 2022 - Sep 2025

B.S. Computer Science

Aachen, GER

- Current GPA: 1.4/1.0
- Relevant Coursework: Elements of Machine Learning and Data Science (1.0), Data Structures and Algorithms (1.0), Computability and Complexity (1.0)

Aalto University

Aug 2024 - Dec 2024

Semester Abroad (B.S. Computer Science)

Espoo - Helsinki, FI

- Current GPA: 5.0/5.0
- Relevant Coursework: Graph Theory (5.0/5.0), Machine Learning (5.0/5.0)

Joseph König Gymnasium

Sep 2014 - Jun 2022

A-Levels

Haltern am See, GER

- **GPA:** 1.2/1.0
- Top of the year in mathematics and physics
- Admission to German Mathematical and Physical Society

Research Experience

Robotics Institute, Carnegie Mellon University

Pittsburgh, PA, USA

Undergraduate Research Intern, Robotics Institute Summer Scholars Program

May 2024 - Present

- Conducted research in Control Theory, Path Planning, and Autonomous Vehicles
- Developed a Model Predictive Control (MPC) framework using Control Barrier Functions (CBFs) to enhance trajectory planning safety
- Achieved more risk-aware trajectory behavior, outperforming existing state-of-the-art methods
- Implemented real-time computations using JAX-Python on CPUs, reducing dependency on costly GPUs
- Currently preparing research for submission to a major U.S. conference

Professional Experience

Siemens Logistics

Düsseldorf, GER

Software Engineering Working Student

Feb 2023 - Nov 2023

• Designed and programmed (in C#) features for a software tool used in the design of airport baggage handling systems

PROJECTS

Math exercise generator | Javascript, HTML, Vue.js

Sep 2023 - Oct 2023

• Created a free-to-use math exercise generator with automatic solution generation

Report on Neuroevolution of Fixed Topologies 🖾 | RL, Python, gym (OpenAI)

2021

- Implemented Neural Networks and an evolutionary algorithm from scratch
- Wrote a report on the application of my algorithm to OpenAI Gym problems

DISTINCTIONS

DAAD Scholarship: RISE Worldwide

March 2024

• Scholarships for research internships for German Bachelor students of natural sciences and engineering

Dean's List honors • Top 5% the academic year 2022/23.

Feb 2024

TECHNICAL SKILLS

Languages: German (mother tongue), English (C1) Programming languages: Python, Java, C#, C++, C

Other Tools: LATEX, ROS, Linux, Git