

Philipp Ahrendt

📧 phiahr | 📞 +4917643994309 | ✉ ph.ahrendt@gmail.com | 🌐 philippahrendt |
📍 Berlin, Germany



*I am a master's student highly interested and talented in robotics. My main domains of interest lie at the intersection of Control Theory and Machine Learning. Additionally, I have experience working on larger robotics projects with *ROS2*. I have a great overview of the technologies and tools needed to develop and research in the field of robotics.*

Professional Experience

Flox Robotics

RESEARCH ENGINEER

Stockholm, Sweden

01/2024 - 10/2024

- Investigated how altitude information of a UAV can be incorporated into an object detection model
- Improved average precision of small object detection by 2% while reducing number of parameters by 75%

SoundHound

SOFTWARE ENGINEER

Berlin, Germany

04/2022 - 08/2022

- Extended voice assistance API to support a new German-language domain, enhancing natural language understanding and generation capabilities
- Increased testing efficiency by enhancing a Python-based tool using pair-programming

Ayrendoo

COFOUNDER AND LEAD DEVELOPER

Berlin, Germany

02/2020 - 10/2021

- Created a social meetup app in Swift with a location based map feature, group chat capability, scalable user and event database with Firebase and more
- Managed the team by introducing new work ethics such as daily stand-ups, sprints and flexible or fixed working times to increase productivity and help with consistent work output
- Led feature integration for the MVP, ensuring a cohesive and functional beta launch

ETAS K.K. - Subsidiary of Robert Bosch GmbH

CYBERSECURITY ENGINEER INTERN

Yokohama, Japan

08/2019 - 01/2020

- Developed a Python-based interface enabling proprietary C-based hardware (CAN-bus) to integrate seamlessly with the open-source python-can tool
- Created a testing suite to streamline the evolution of a penetration-testing tool, ensuring functionality after each code modification

Artiminds Robotics GmbH

JUNIOR SOFTWARE ENGINEER

Karlsruhe, Germany

07/2017 - 05/2019

- Developed C++ features for company software, including an export function that generated a template graph of robot instructions in a customer-ready Word document
- Enhanced interface functionality and user-friendliness by refining existing features and implementing effective workarounds for critical legacy code
- Integrated a camera sensor for real-time image feed from a KUKA robot into company software using KUKA robot language without any prior experience

Education

KTH Royal Institute of Technology/ Polytech Nice Sophia

MSc: INTELLIGENT AUTONOMOUS SYSTEMS (DOUBLE DEGREE)

Stockholm, Sweden/ Nice,

France

2022 - 2024

- Grade: A, Thesis: Investigating Altitude-Adaptive Methods for Enhancing Small Object Detection on UAVs

Karlsruhe Institute Of Technology

BSc: ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Karlsruhe, Germany

2016 - 2021

- Thesis: Detection and Classification of Higher Cognitive Functions using an EEG-based Brain-Computer Interface

Skills & Interests

Skills

C++ | Python | Git | Machine Learning | ROS | Computer Vision | Linux | PyTorch | TensorFlow | Control

Languages

Fluent in German, English, French

Interests

Intersection of Robotics and AI | Tennis | Effective Altruism | Learning new skills