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📍 United States of America

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SKILLS

Python   C++

ROS & ROS2   Linux

C   Matlab   Simulink

Machine Learning

PyTorch   TensorFlow

Reinforcement Learning

dSPACE SIL and HIL tools

INTERNSHIPS

Ford - Simulation Intern
(05/2018 - 08/2018)

dSPACE - Automated Driving
Intern (05/2017 - 08/2017)

TESLA - Test Automation
Intern (09/2016 - 12/2016)

Bosch - Electric Drives Intern
(05/2016 - 08/2016)

LANGUAGES

English
Full Professional Proficiency

German
Full Professional Proficiency

Philipp Waeltermann
Senior Software Engineer and Developer

WORK EXPERIENCE

Senior Software Engineer (Level 8)
Ford Motor Company

09/2021 - Present   *Palo Alto, CA*

Achievements/Tasks

- Guided software development of 10+ engineers by conducting code reviews and designing code architectures
- Initiated and guided projects with simulation, validation & verification, and fleet operations teams to provide support for L3 developers
- Planned the replacement of supplier-provided algorithms for sensor fusion, lidar perception, radar perception, and decision making with in-house solutions

Software Engineer (Level 7)
Ford Motor Company

02/2020 - 09/2021   *Palo Alto, CA*

Achievements/Tasks

- Developed ROS2 based framework for L3 prototype vehicle fleet
- Build processing pipeline for lane-level map used for path-planning algorithms
- Programmed CAN to ROS2 library for faster integration of new CAN-based devices using C++, C, Python, and Jinja2
- Integrated reinforcement learning based decision making algorithm
- Led cooperation with a computer vision startup for enhanced perception features
- Created guidelines for development and code review process of 5+ L3 developers

Controls Engineer (Level 6)
Ford Motor Company

02/2019 - 02/2020   *Palo Alto, CA*

Achievements/Tasks

- Designed and built L3 prototype vehicles using my knowledge of CAN, dSPACE MicroAutoBox and dSPACE ControlDesk
- Led integration of longitudinal controller using Simulink and object list processing using ROS & ROS2 for Python and C++
- Assisted with integration of lateral control and path-planning algorithms

EDUCATION

Master of Science in Computer Science (Specialization: Machine Learning)
Georgia Institute of Technology

09/2020 - 12/2022   *Online | GPA: 4.0*

Self-Driving Car Nanodegree Program
Udacity

03/2019 - 09/2019

Bachelor of Science in Mechanical Engineering (Minor: Computer Science)
Michigan State University

08/2014 - 12/2018   *East Lansing, MI | GPA: 4.0*