

Alfonso Ros

Curriculum Vitae

Plinganserstr. 7A
81369 München
☎ +49 173 6523397
✉ alfonso.ros.88@gmail.com
in Alfonso Ros Dos Santos
🌐 [rosds](#)

Summary

A friendly and dedicated software developer with over 7 years in the German automotive industry, specializing in high-performance middleware for automotive applications. Currently working on Apex.OS, a general-purpose middleware with a strong automotive focus and ROS compatible. Previously, as part of the platform team at Autonomous Intelligent Driving GmbH, contributed to the development of a middleware for autonomous driving vehicles. With a strong interest in system-level software development, brings expertise in C/C++, Rust focusing on concurrency, performance and embedded systems.

Work Experience

- June 2022 - present **Senior Software Engineer**, APEX.AI GMBH, Germany
- Part of Apex.OS middleware team of about 10 persons, focused in the communication with external ECUs and the DSL code generation infrastructure. (vsomeip, cantools, ISOBUS, UDS, C++17)
 - Implementation of the internal integration testing framework. (Docker, Bazel, Boost.Asio, libssh2)
 - Supporting clients on porting their ROS applications to Apex.OS.
- 2020 - 2022 **Software Engineer**, ESR LABS GMBH, Germany
- Contribution to Northstar, an open-source container runtime written in Rust. (POSIX, Cgroups, Tokio)
 - Responsible for the design and implementation the Intrusion Detection System, an embedded Linux application reacting to concurrent signals (Android's messaging and concurrency, Rust).
- 2019 - 2020 **Software Engineer**, AUTONOMOUS INTELLIGENT DRIVING GMBH, Germany
- Part of the Software Platform Team, a group of about 9 persons dedicated to the development of Fusion, a Vehicle Middleware inspired in Qt.
 - Mainly contributed to the implementation of object method calls and object interface synchronization. (C++11, rti's DDS)
- 2018 - 2019 **Project Engineer**, TTTECH AUTO AG, Germany
- Worked in a self-organized team of 10 persons supporting BMW's Autonomous Driving Project.
 - Negotiation and planning of units of work for every sprint (LeSS)
 - mostly contributing to the implementation of the *Keep Lane Assistant* (C++14, ROS).
- 2016 - 2018 **Software Engineer**, EVOSOFT GMBH, Germany
- Part of small team of 5 persons, responsible to implement a real-time monitoring system for electrical substations (C/C++, DPDK, RTLinux).
 - Setup of Continuous Integration and Testing for different micro controllers (Yocto-Linux, LAVA, Python, Go)
- 2015 - 2016 **Working Student**, SIEMENS CORPORATE TECHNOLOGY, Germany
- Implementation embedded engine for semantic information processing of *Internet of Things* descriptions. (C/C++, Cortex-M4, CoAP).
- 2012 - 2013 **Software Engineer**, TALPOR SOLUTIONS C.A., Venezuela
- Web Development using Python (Django).
- 2008 - 2011 **System Administrator**, Universidad Simón Bolívar, Venezuela
- Network and System administration (DHCP, DNS, E-Mail, NFS, LDAP).
 - Teaching Linux and C Programming courses.

Technical skills

- Languages C/C++17, Rust, Python
- Software Git, Bazel, CMake, GDB, Linux, Neovim

Education

- 2013-2016 **M.Sc. Informatics**, Technische Universität München, Germany
Major: Computer Vision and Machine Learning.
- 2006-2012 **B.S. Computer Science and Engineering**, Universidad Simón Bolívar, Venezuela
Award: 2011's Best Computer Science thesis - IEEE & Ineectra Venezuela.

Languages

- Spanish Mother tongue
- English Professional working proficiency
- German Intermediate proficiency

Hobbies

playing Video and Board games, Coffee and watching horror movies.