AJAY GOWDA

Amsterdam, Netherlands

☎ +31-645353160   ✉ ajaysgowda@gmail.com   in ajaysgowda

WORK EXPERIENCE

EVBOX   **Amsterdam, NL**
Systems Validation Engineer   *Sep 2020 - Present*

- Design, develop and execute automated firmware tests to validate system requirements like OCPP and IEC-61851 / ISO-15118 compatibility, happy/unhappy paths, and custom features.
- Visualization of data with dashboards (Google data studio, Grafana) from databases (Google Big Query) for analysis.
- Develop, deploy and maintain data acquisition infrastructure like databases, visualization tools and vpns on AWS.
- Design and develop test benches for correct and repeatable hardware and software validation and verification.
- Assist customers with highly customized charging infrastructure implementation.
- Assist with pre-compliance testing for certifications such as Energy Star and UL.

ETERNAL SUN SPIRE   **The Hague, NL**
Development and Validation Engineer   *Aug 2018 – Jul 2020*

- Troubleshoot issues with prototype and production photovoltaic Test Equipment in Lab and Manufacturing lines.
- Work with customers on development projects by fixing critical issues, adding features and tuning prototype machines.
- Design and develop control architecture for photovoltaic test machines for optimal performance and data acquisition.

GENERAL MOTORS   **Milford, USA**
Hybrid Powertrain Development Engineer   *Jan 2016 – Aug 2018*

- Develop efficient powertrains with optimal fuel economy and exceptional performance via work on batteries, motors, hydraulic systems, internal combustion engines, and power electronics.
- Ensure vehicle test fleet is up to date with latest hardware and software.
- Collect and analyse data from vehicles on test tracks, in extreme locations, and state of the art high feature test cell susing vehicle monitoring software and hardware.
- Validate new hybrid and electric powertrains subjectively and objectively.
- Ensure vehicle test fleet is up to date with latest hardware and software.

Algorithm Development Engineer – Thermal Controls   *Jul 2015 – Jan 2016*

- Developed thermal control system for liquid cooled High Voltage battery systems.
- Software functionality test using SIL and HIL testing techniques.

UNIVERSITY OF WASHINGTON   **Seattle, USA**
Research Assistant at EcoCAR Laboratory   *Oct 2013 – Jun 2015*

- Build, run and assess hybrid powertrains configuration for real world feasibility
- Worked on control logic of the supervisory controller that interlinks the two powertrains. (Electric and Diesel)

EDUCATION

UNIVERSITY OF WASHINGTON   **Seattle, USA**
Master of Science in ME, Control Systems   *Sept 2013 – May 2015*

- Linear Controls, Digital controls, Optimal Controls
- Master's Thesis - System Level Modeling and Simulation of a Hybrid Vehicle.

MANIPAL INSTITUTE OF TECHNOLOGY   **Manipal, India**
Bachelor of Science in Mechatronics Engineering   *June 2009 – May 2013*

- Control Theory, Analog and digital circuit design, Embedded Systems, PLC, Hydraulic and Pneumatic systems.

TECHNICAL SKILLS

Languages: Python, MATLAB/ Simulink, JAVA, C/C++, TypeScript, HTML, Structured Text (PLC),YAML, XML, SQL

Technologies: AWS, Google Big Query, Google Data Studio, Grafana, Influxdb, Docker, Linux, GIT, Polarion

Frameworks: FastAPI, Django, pytest, opencv, pymodbus, socketCAN

Automotive industry tools: MDA, INCA, Vehicle Spy, dSPACE, neoVI, High Performance Driver Education from GM

Standards: OCPP, ISO-15118, IEC-61851, MODBUS, CAN, REST API, Websockets, OPC UA, OBD2, EEBUS