# AJAY GOWDA

#### Delft, Netherlands

**८** <u>+31-645353160</u> **■** ajaysgowda@gmail.com **n** ajaysgowda

#### WORK EXPERIENCE

EVBOX Amsterdam, NL

Systems Validation Engineer

Sep 2020 - Present

- Design, develop and execute automated firmware tests on current and next gen products for regression testing.
- Develop, deploy and maintain data acquisition infrastructure like databases, visualization tools and vpns on AWS.
- Design and develop one off test setups for unique test scenarios including data acquisition and generating reports.
- Design and develop test benches for correct and repeatable hardware and software validation and verification.
- Assist with pre-compliance testing for certifications such as Energy Star and UL.
- Develop and maintain EOL (End of Line) test applications.

# 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.
- Design and develop control architecture for complex machines to enable 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.
- Analyze and collect 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.
- Construct one-off wiring harnesses that include high voltage and CAN communication loops.

# Algorithm Development Engineer – Thermal Controls

Jul 2015 - Jan 2016

• Software functionality test using SIL and HIL testing techniques.

#### UNIVERSITY OF WASHINGTON

Seattle, USA

Research Assistant at EcoCAR Laboratory

Oct 2013 - Jun 2015

- Research Assistant at UW EcoCAR Lab.
- 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 - CGPA - 3.6/4.0

Sept 2013 - May 2015

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

#### MANIPAL INSTITUE OF TECHNOLOGY

Manipal, India

Bachelor of Science in Mechatronics Engineering - CGPA - 8.9/10

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, Grafana, Influxdb, Wireguard, MQTT, REST, Docker, Linux, SCADA, MODBUS, OPC, ARM, GIT, Polarion

Frameworks: FastAPI, Django, pytest, opency

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