AJAY GOWDA

Amsterdam, Netherlands

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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.
- Troubleshoot issues with prototype and production Photovoltaic Test Equipment in Labs and Manufacturing lines.

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.
- Analyze and collect data from vehicles on test tracks, in extreme locations, and state of the art high feature test cell using vehicle monitoring software and hardware.
- Validate new hybrid and electric powertrains subjectively and objectively.
- Construct one-off wiring harnesses that include high voltage and CAN communication loops.

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*

- Research Assistant at UW EcoCAR Lab.
- Build and run software models to assess feasible hybrid powertrains
- 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, Big Query, Grafana, Influxdb, Wireguard, MQTT, REST, Docker, Linux, SCADA, MODBUS, OPC, ARM, GIT, Polarion
Frameworks: FastAPI, Django, pytest, opencv, pymodbus, Angular cli
Automotive industly tools: MDA, INCA, Vehicle Spy, dSPACE, neoVI, High Performance Driver Education from GM