

Mustafa Sheikh

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SUMMARY

Software Tools Developer and Electrical Engineer with six years of professional experience working in an agile corporate environment.

Skilled at gathering requirements to deliver hardware and software solutions for complex problems while collaborating with global teams.

SKILLS

PROGRAMMING

Shell • Python • MATLAB
UML • C++ • Git • SVN

ENGINEERING

Simulink • Vector CANalyzer
Testing • Fixture Design
dSPACE Tools • LabView

EDUCATION

UNIVERSITY OF WINDSOR

BSC IN PHYSICS

Oct 2011 | Windsor, ON
Cum. GPA: 85%
Major GPA: 88%

UNIVERSITY OF WINDSOR

BSC IN ELECTRICAL ENGINEERING

Oct 2009 | Windsor, ON
Cum. GPA: 84%
Conc. in Communications with Co-op

COURSEWORK

PHYSICS

Quantum Mechanics
Statistical Mechanics
Classical Mechanics
Electromagnetism
Fourier Analysis
Complex Analysis

ENGINEERING

Coding and Information Theory
Digital Signal Processing
Multimedia Systems
Control Systems Engineering
Wireless Communication

EXPERIENCE

MOLEX CONNECTED MOBILITY | SOFTWARE DEVELOPMENT ENGINEER

January 2019 – Present | Rochester Hills, MI

- Developed and delivered Python based multi-threaded solution to flash software on Automotive Ethernet Gateway module subsystem in vehicle using a web-interface for OEM which is currently being used for production.
- Worked on-site on Autonomous Vehicles to support OEM engineers and Ethernet Gateway firmware engineers to support testing and debugging.
- Investigated and advised on best practices for LabView and it's use for in-house production testing solutions.
- Lead production testing efforts to review PFMEA as part of a cross-functional team.
- Participated in peer within team for Software solutions and UML based documentation.

FORD MOTOR COMPANY | LEAD FEATURE EXPERT

July 2018 – December 2018 | Allen Park, MI

- Responsible for testing of Cross Traffic Alert Feature for new vehicles.
- Defined HW boundary and scope of testing while leading off-shore resources to ensure proper testing was completed within scope.

FORD MOTOR COMPANY | AUTOMATION SOLUTIONS DEVELOPER

January 2015 – June 2018 | Dearborn, MI

- Created tool to facilitate manual testing for HIL racks used by +40 people in Python using dSPACE API: increasing efficiency and user productivity.
- Researched and proto-typed Appium based Phone Automation solution in Python which was later developed as a full fledged solution by junior engineer who I mentored.
- Adapted, integrated, extended, and maintained Squish based Sync touchscreen automation tool created in Python. Enabled our lab to perform automated testing for features with Sync screen.
- Worked with internal customers and external suppliers to develop and deliver automated locking solution which required Python and part design expertise.

FORD MOTOR COMPANY | HIL ENGINEER

June 2012 – December 2014 | Dearborn, MI

- Successfully restructured and deployed dSPACE license scheme to maximize usage and minimize cost by bundling license dongles by user function.
- Managed and acquired licenses for the group of +40 people with an operating budget of 125k USD per annum and total value of 1 million USD.
- Successfully performed parts acquisition and BOM validation for 100s of parts for 3 HIL racks for two separate programs simultaneously.
- Worked with suppliers, engineers, and Ford purchasers to resolve issues and negotiate timelines and deliverables.
- Lead for Powertrain HIL Subsystem which required coordinating changes and expanding capability using MATLAB and Simulink for modelling or reading schematics to make hardware changes.