

Mustafa Sheikh

www.linkedin.com/in/mustafajsheikh
mustafa.sheikhj@gmail.com | 313.782.1205

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
C • C++ • Git • SVN

ENGINEERING

Simulink • Project Management
Testing • Fixture Design
dSPACE Tools • Smart Motor Control

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
Electromagnetism

ENGINEERING

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

EXPERIENCE

FORD MOTOR COMPANY | LEAD FEATURE EXPERT

July 2018 – Present | 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.

CO-OP AND INTERNSHIPS

FRAUNHOFER USA | OPTICAL ENGINEERING INTERN

October 2011 – February 2012 | Plymouth, MI

Validated output and spectral characteristics of IR diode lasers. Worked with senior engineers to align laser systems.

INSTITUTE FOR DIAGNOSTIC IMAGING RESEARCH | SUMMER STUDENT

June 2011 – October 2011 | Windsor, ON

Worked to troubleshoot ultra-sonic sensor noise issue on spot-welding robot. Designed and executed experiments to isolate problem using MATLAB to analyze data.

TRQSS | MANUFACTURING ENGINEERING INTERN

May 2006 – August 2007 | Tecumseh, ON

Used SolidWorks to create fixtures and jigs in addition to automation solutions for seat-belt manufacturing lines.