

CARLOS FLORES

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OBJECTIVE

To obtain a full-time position in front-end web development utilizing technical and analytical skills

EDUCATION

CareerFoundry – Berlin, Germany (Remote)

August 2020 - March 2021

Full Stack Web Development Certificate

Rice University – Houston, TX

Graduated May 2016

Bachelor of Science in Mechanical Engineering

WORK EXPERIENCE

General Motors – Pontiac, MI

August 2016 – February 2018

TRACK: Technical Rotation and Career Knowledge Engineer (2016 – 2018)

- Joined early career development program within company's Global Propulsion Systems department

Development and Validation Engineer: Transmission Components Group (2016 – 2017)

- Investigated torque converters under warranty having issues related to slip and developed work orders for component testing
- Conducted analytical stress testing in collaboration with lab technicians for potential transmission valve body imperfections

Design Release Engineer: GM-Honda Fuel Cell Propulsion Systems (2017)

- Created Statement of Requirements and Component Technical Specifications for fuel cell coolant temperature sensor; interfaced with Japan-based Honda fuel cell design team to finalize SoR and CTS for pre-production parts
- Defined Interface Control Document, prepared Design Failure Mode Effects Analysis, and managed design release cost
- Interacted with domestic and international suppliers; evaluated supplier capability to meet product requirements

Algorithm & Software Engineer: CVT Transmission (2017)

- Conducted onsite vehicle testing for CVT software for MY 2019 Chevrolet Malibu; recorded CVT performance under various driving conditions and calibration settings, and analyzed test data to verify CVT software performance
- Developed Simulink code for CVT software features; authored work orders for Simulink code and oversaw approval process

Electronic Controller Engineer: Engine Controllers (2017 – 2018)

- Tested performance of Engine Controller Module through use of test bench and Lauterbach in-circuit emulator; developed Trace32 scripts for automated ECM testing

Johnson Controls, Inc. – Houston, TX

June 2015 – August 2015

Sales & Project Engineering Intern

- Created Excel reporting process to share upcoming bid information for construction projects in the Houston area from iSQFT web resource; resulted in identification of more than 130 sales opportunities
- Documented a comparison of product specifications to engineering specifications for air handlers in client project; prepared results for sales team and project engineering team

GE Oil & Gas – Alexandria, LA

June 2014 – August 2014

Industrial Engineering Intern

- Inventoried and catalogued hydrostatic test fixtures and functional test room fixtures for the design of a plant-wide database; resulted in two streamlined processes and an estimated annual savings of \$242,000
- Edited commercial part routings in plant's SAP system to contain standardized verbiage after company merger; eliminated scrap by maintaining traceability of over 350 commercial parts and avoided scrap costs of \$1000+ per occurrence
- Modeled updated test fixtures, soft jaw blanks, butt-weld preps and test room washers using SolidWorks software

LEADERSHIP & AFFILIATIONS

Rice Center for Engineering Leadership (RCEL) – Houston, TX

August 2014 – May 2016

Engineering Leadership Lab Coach (2015 – 2016); Speaker Series Coordinator (2015 – 2016)

- Coached group of 4 underclassmen students through a variety of interactive activities to hone leadership skills; evaluated performance of team and provided constructive feedback to students
- Coordinated speaking events and panels for interactive discussions between professional engineers and RCEL students

Society of Hispanic Professional Engineers (SHPE) – Houston, TX

August 2012 – May 2016

Treasurer (2014 – 2015); Community Service Chair (2013 – 2014)

- Managed yearly budget of above \$17,000; budgeted for RICE SHPE outreach events and student sponsorships for conferences
- Wrote grant proposals to obtain corporate sponsorships for the club; resulted in \$13,000 in sponsorship money for 2014-15 academic year, an increase in \$3,000 from previous year

SKILLS

- *Software and Tools:* JavaScript, React, React Native, Node.js, Angular, MongoDB, HTML, CSS, Git, SolidWorks, Microsoft Office, LabVIEW, Simulink, ETAS MDA, ETAS INCA, Lauterbach Dev Tools, Trace32, MATLAB, R
- *Additional Languages:* Spanish (Fluent)
- *Industrial Skills:* Lathe & Mill Operation, Arc Welding, Mig Welding

HONORS & AWARDS

Great Minds in STEM Conference – College Bowl First Place

2014