Sebastián Arrazola

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Summary of Qualifications

Computer

• Experience with Git to facilitate code management and collaboration efforts
• Familiarity with multiple terminal emulators including Git Bash, Cygwin, and Windows Terminal
• Proficient in building robust responsive web applications using a variety of technologies including HTML, CSS, JavaScript, jQuery, Bootstrap, Node.js
• Knowledge of many web libraries and frameworks including React.js and Express.js
• Outstanding knowledge of package management via NPM to implement required application features within the Node.js ecosystem
• Experience designing modular applications based on established best practices/design paradigms including MVC (Model View Controller) through the use of development stacks such as MERN (MongoDB, Express, React, Node) and LAMP (Linux, Apache, MySQL, Python)
• Familiar with SQL and NoSQL databases including Oracle, MySQL, MongoDB and their respective ORM's (Object Relational Mappers)
• Experience with Agile software development model
• Excellent working knowledge of embedded systems implementation utilizing low-level technologies including Assembly, C/C++
• Knowledge of object-oriented programming languages and design philosophy, particularly as it relates to the Java Enterprise (J2EE) ecosystem
• Exposure to several Linux flavors (RedHat, Ubuntu, CentOS, etc.)
• Exceptional scripting and automation abilities with shell/bash

Work Experience

Ford Motor Company **Sept. 2016—Present**
Hybrid Powertrain Calibration Engineer Dearborn, MI

• Implemented simple machine language programming skills to facilitate agile software development.
• Experience with to microprocessors-programming, and operating system design.
• Applied coding skills to diagnose vehicle OBD software features, using Assembly and C/C+ programming language.
• Participate in a cross-functional team to release calibration software that will support new product releases and updates to those products over time.
• Work toward developing calibrations in our hybrid control system that improve our gas emissions, while making sure to maximize hybrid range and meet customer drivability requirements.
• Collect data with ATI in our emissions lab to confirm if projected effects on emissions and derivability are represented, after making changes in the powertrain control system.
• Validate vehicle powertrain control system changes in different weather conditions on public road and proving grounds around the country.
• Train rotational program employees that are new to the team, with respect to hybrid powertrain calibration and administer tasks for them to help me with my objectives while also allowing them exposure.

Center for Advanced Life Cycle Engineering **Jan. 2016—Aug. 2016**
Research Intern College Park, MD

• Analyzed degradation of tantalum capacitors due to humidity and thermal exposure.
• Manually collected LCR and DC Leakage electrical measurements routinely and logged them in excel for examination.
• Aided in streamlining (automating) test data acquisition via implementation of LabVIEW controlled multiplexers connected to the LCR and DCL measurement devices, as well as Thermocouples and humidity sensors inside of test chambers which continuously stressed hundreds of tantalum capacitors.

Education

Michigan State University College of Engineering **Nov 2020**
Professional Certificate, Full-stack web dev Bootcamp GPA 4.0

• MSU's full-stack web development Bootcamp offered an intense educational program, requiring 40+ hours per week for 24 weeks.
• Course highlights: Learned to work with Git, Git Bash, HTML, CSS, JavaScript, jQuery, Bootstrap, Node.js, Express.js, Express-session, Express-handlebars, React.js, Database Theory, MySQL, Sequelize, NoSQL, MongoDB & working in an agile-based team environments.

A. James Clark School of Engineering, University of Maryland **May 2016**
B.S. Mechanical Engineering GPA 3.1

• Dean's List: Fall 2015, Spring 2016
• Course highlights: Computer-Aided Design, Heat Transfer, Electronics & Instrumentation, Vibrations & Controls, Automotive Design Theory, Vehicle Dynamics, and Fundamentals of Internal Combustion Engines

Membership & Affiliations

• **Ford Hispanic Network**—*Active Member* **Spring 2017—Present**
• **Society of Automotive Engineers**—*Active Member* **Fall 2015—Present**
• **American Society of Mechanical Engineers**—*Lounge Manager* **Spring 2015—Aug. 2016**
• **Society of Hispanic Professional Engineers**—*Active Member* **Fall 2015—May 2016**

GitHub

• github.com/SeaBa55