Jose Ibarra

jose@icepicky.com

Qualifications

- 8 years of Java experience; 3 years of Javascript experience; 2 years of C++ experience.
- 1.5 years of data visualization research experience.
- Developed mainframe and Java applications to manage part logistics, orders, and inventory for General Motors.
- Developed mobile applications for Sandia National Labs.
- Developed smaller applications in free time and for hackathons, including augmented reality resource finder app, calendar and vehicle scheduling app, and autonomous vehicle scheduling app.

Project & Development Experience

House Repository for Every Part (HREP) – General Motors: *Internal Project*
May 2017 – Present

- Rewrite of existing Access application in the Spring MVC framework and a custom jQuery framework.
- Created and maintained CI/CD system which greatly reduced deployment and defect detection times; combined Gradle, Jenkins, CA Release Automation, Junit, and Selenium.
- Designed Selenium framework to improve test creation for Kendo Grid pages which reduced test creation time from several days to just one day.
- Mentored several junior developers including integrating testers into the development team.

Material Global Optimization (MGO) - General Motors: *Internal Project*
June 2015 – Present

- Monolithic, 24/7 supply chain system that manages the planning, ordering, and scheduling for parts and shipping in manufacturing plants, managing billions of dollars of supply.
- Developed backend modules to do a majority of business logic; used frontend (JSP, JS, jQuery), backend (Java), mainframe technologies (PL/I and COBOL).
- Improved mainframe unit testing framework utilizing Junit which shifted unit testing from mostly manual to mostly automated, significantly reducing retest time.
- Led proof of concept for upgrading Struts 1 to Struts 2 and improved existing estimates by 35%.
- Technical leader for a Struts 1 to SpringMVC conversion project.
- Improved existing and created new Struts 1 conversion tools to lower file conversion time by 20%.
- Developed a proof of concept mobile application utilizing Angular.js which was expected to improve plant worker productivity through a simple UI.
- Trained 20 new hires in Java and SpringMVC skill to onboard them quickly for a Struts 1 to SpringMVC conversion project.

Geo-Genealogy and Geo-Demographics Data Visualization Research - VADER Research Lab:
https://doi.org/10.2312/eurova.20141143, https://demo.vaderlab.org/name/
Aug. 2013 – May 2014

- Application displayed a heatmap of surname density for the United States and the income distribution for that surname in a web application utilizing JS, jQuery, D3.js and Java web services.
- Mined over 60 million data records from US phonebooks and correlated to zip code-based US Census records; stored data and mining results in MySQL and MongoDB.
- Preprocessed surname maps and income distributions that reduced server processing and improved response times from several minutes to several seconds.
- Developed multi-threaded data preprocessing methods which processed surname data independently and improved processing capability by factor of 5.

SNL Conference Room Scheduler - Sandia National Labs: *Internal Project*
May 2013 – May 2014

- Modernized webpage based scheduling application by designing a map-based, visual iOS app that reduced conference room scheduling time by 10-20%; integrated ArcGIS, Objective-C, Java.
- Constructed Java web services to query SQL servers for needed data.
- Designed user interface using Apple's UI Framework and the ArcGIS framework.

Publications

What's In a Name? Data Linkage, Demography and Visual Analytics - EuroVis Workshop on Visual Analytics 2014: *Wang F., Ibarra J., Adnan M., Longley P., Maciejewski R.*
https://doi.org/10.2312/eurova.20141143, https://demo.vaderlab.org/name/
June 2014

Education

Computer Science, M.C.S. - Arizona State University, Tempe, AZ
Jan. 2015 – Aug. 2018

- *Overall GPA:* 3.70

Computer Science (Software Engineering), B.S. Honors Diploma - Arizona State University, Tempe, AZ

Aug. 2010 – May 2014

- *Overall GPA:* 3.78, *CS GPA:* 4.00, Magna Cum Laude
- *Honors Thesis:* Visual Analytic Tools for Geo-Genealogy and Geo-Demographics

Work Experience

Software Developer - General Motors: *Chandler, AZ*

June 2014 – Present

- Developed the Material Global Optimization and House Repository for Every Part projects.
- Continually rated exceeds expectations in yearly performance reviews.
- Trained in Java and mainframe technologies to be able to develop for the full application stack.
- Participated and won multiple hackathons for General Motors employees. Applications included an autonomous vehicle scheduling app (Node.js & Android), an augmented reality resource finder app (Node.js & Android), and a car scheduling app synced with user calendars (Java & Android).
- Managed development team meetings to keep up to date with architecture changes and new technologies, including new development tools (Upsource, Jenkins) and new development frameworks (Angular.js).

Undergraduate Technical Intern - Sandia National Labs: *Albuquerque, NM*

May 2013 – June 2014

- Developed the SNL Conference Room Scheduler and SNL Building Search projects.

Undergraduate Research Assistant - Arizona State University: *Tempe, AZ*

Jan. 2013 – May 2014

- Researched and developed the Geo-Genealogy and Geo-Demographics Research and Linked Animal-Human Health Visual Analytics Research projects.

Skills & Strengths

- **Programming Languages** –Java, Javascript, Python, PL/I, COBOL
- **Frameworks & Libraries** – jQuery, Spring MVC, Android
- **Programs and Tools** –IntelliJ, Gradle, Vim, Git, Junit, Selenium, Jenkins