FROILA DSOUZA

(858) 250-9855 | fdsouza@asu.edu | https://www.linkedin.com/in/froiladsouza

Education

Masters in Computer Science *Arizona State University- Tempe, Arizona GPA: 4.11/4*   **Jan 2017 – Dec 2018**
Courses: Mobile Computing, Database Management System Implementation, Data Mining, Adaptive Web, Distributed Database Systems
Bachelors of Technology Information Technology *National Institute of Technology Karnataka, India GPA: 3.78/4*   **Jul 2010 – May 2014**
Courses: Object-oriented Design ,OO Programming, Web Applications Data Structures, Software Engineering, Relational Database Concepts

Work Experience

Software Engineer- Business Intelligence - *Oracle Corporation* – Bangalore, India   **Jun 2014 - Nov 2016**
- Led an initiative to reduce support effort by 60% by designing an innovative automated workflow to troubleshoot and diagnose known bugs.
- Migrated legacy **SQL** based BI reports into easily customizable OTBI reports with zero compile/run time errors as a result of extensive integration testing and strong attention to detail.
- Collaborated with multiple products and engineering teams to get a better understanding of the functional requirements and specifications and coordinated technical discussions which required top-notch communication skills, analytical skills and problem solving skills.
- Redesigned and Integrated a legacy keyword based similarity documentation tool into the Oracle Fusion main frame that reduced bug resolution time by 20%. The final product supported multiple search sources across several cross product documentation data dumps.
- Developed and customized high quality adhoc **Java** reports for cloud customers using optimized architecture design of drill down hierarchies and slice-and dice mechanisms that reduced average runtime of high volume reports by over 30%.
- Provided customer service to cloud customers with hands on demonstrations over web conferences to resolve issues and explain bug fixes.

Data Science Intern - *Data Science Research Group, NITK* – Mangalore,India   **Jul 2013 - May 2014**
- Analyzed existing document classification algorithms and proposed an optimized algorithm that improved classification accuracy by 15% and reduced process runtime through the use of a hybrid data structure.
- Implemented the technique in **Java**, testing the code on well known datasets and visualized results using **Spring MVC and Prefuse API**.

Software Engineer Intern - *India Innovation Labs* – Bangalore, India   **May 2012 - Jul 2012**
- Designed an **Android** application that recommends deals for users based on GPS location using Google Maps API and tracked previous shopping history.

Projects

- **Graph Database System:** Transformed RDBMS Minibase into a fully functional Graph Database system using **Java SE**. Converted and extended Relation and Tuple based programs to accommodate and store Node and Edge information.
- **Design Enhancement of Resuscitation Documentation Application:** Collaborated with multiple doctors and nurses of Mayo Clinic, Arizona to perform a thorough usability analysis to enhance the reliability, efficiency and accuracy of an Ipad based **iOS** application. Simplified the task of documentation by 40% through optimization of UI design and incorporation of the stylus.
- **Solving Mathematical Questions using Echo:** Leveraged the Alexa NLP voice recognition APIs to solve specific mathematical problems described in simple sentences. Used **Python**, DynamoDB and Amazon Web Services to build and deploy the application.
- **Data Storage as a Service:** Integrated multiple databases and their optimal capabilities, in order to provide the best data storage solution possible with the least prerequisite knowledge and configuration requirements for the programmer, using **Java SE**, MySQL, Cassandra and MongoDB (NoSQL databases). Exported the functionality of the system as a web service.
- **Virtual Learning Environment:** Developed a Web based Virtual Learning Environment for students to learn creative and language skills. Integrated a Second Life Virtual Classroom. Built using **Java EE**, DB2 and HTML, CSS, AJAX for front-end.

Professional Certifications

- Oracle Certified Associate, Java SE 7 Programmer
- Oracle Certified Expert, Java EE 6 Web Component Developer
- Competent Communicator and Leader Certification, Toastmasters International

Technical Skills

Core Competencies: Software Development, Data Science, Distributed Systems, Agile Software Development Lifecycle , SOA
Programming/Scripting Languages : C/C++, Java, C#,Python, HTML, CSS, JavaScript, AJAX, SQL, Windows, Linux, Unix OS, Android
Databases: Oracle,MySQL, Microsoft SQL Server, DB2, MongoDB, Cassandra, DynamoDB
Tools & Frameworks: Eclipse, NetBeans, SVN,GIT, Android Studio, Spring MVC, AWS

Publications

- **"Document Classification with a weighted Frequency Pattern tree algorithm"** Published in IEEE International Conference on Data Mining and Advanced Computing - 2016, Kerala, India. **Won Best Paper Award.**
- **"Wireless Sensor Network Simulator for Routing Protocols"** Published in Elsevier 8th International Conference on Communication Networks - 2014, Bangalore, India.