

# FROILA DSOUZA

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## Education

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

## 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 automated workflow to 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 teams to get a better understanding of the functional requirements and specifications and coordinated technical discussions which required articulate 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 customers with 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** over well known datasets and visualized results using **Prefuse API**.

## 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 of Mayo Clinic, Arizona to perform usability analysis to enhance the reliability and efficiency of an **iOS** application in a fast-paced environment of resuscitation. 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 **AWS** 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 online 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, Javascript for front-end.

## Professional Certifications

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

## Technical Skills

**Core Competencies:** Software Development, Data Science, Agile Development Methodologies, Leadership Skills  
**Programming/Scripting Languages :** C,C++, Java, C#,Python, HTML, CSS, JavaScript, SQL, Shell scripting, Android

## 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.