Mandar Mathure

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EDUCATION

Syracuse University Graduate Student
MS Computer Engineering, August 2016 - May 2018 **GPA: 3.83/4**
Advanced Computer Architecture, VLSI Design Methods, Digital Machine Design, Object Oriented Design, VLSI Testing and Verification, Android Programming

University of Mumbai, Pillai College of Engineering **Aggregate 71%**
B.E. in Electronics Engineering, 2011-2015

TECHNICAL SKILLS

- C++, C, Java, SQL, PHP, HTML, Android Programming, CSS
- VHDL, Verilog, System Hardware Architecture
- Design for Testability, Design Verification, TetraMAX
- Synopsys Design Compiler, Modelsim, Cadence tools (Virtuoso Schematic and Layout editor)

WORK EXPERIENCE

Android Developer at DynaGarde **April 2017 – Present**

- ✓ Developing an android application that tracks the location of a Subject Protection Device(SPD) and allows users to use some pre-defined geofences in-order to monitor the SPD's location.
- ✓ Working mainly on developing the User Interface for the application, its user authentication and data storage capabilities.

PROJECTS

- **Ride On! – A Carpooling Android Application** **February 2017 – May 2017**
  - ✓ An android application that connects users travelling from the same location to a common destination.
  - ✓ The application works on real time data stored in Firebase Database and other user centric information stored in Firebase Storage supported by Google Cloud.
- **Dependency Based Code Publisher using C++ and HTML** **March 2017 – April 2017**
  - ✓ Developed a repository that manages and publishes source code files as web pages with embedded child links. Each link refers to a code file that the displayed file depends on.
  - ✓ The publisher generates an HTML file for each C++ source file.
  - ✓ The inputs to the publisher are C++ source code files and its outputs are HTML code.
- **Built a Type-based Dependency Analyzer using C++** **Feb 2017 – March 2017**
  - ✓ The analyzer extracts lexical content from source files and builds a Type Table and an Abstract Syntax Tree.
  - ✓ Dependency analysis is performed on a set of files and the results are written, in XML format, to a specified file.
- **Implemented a Key/Value Store Database using C++** **Jan 2017 – Feb 2017**
  - ✓ Created a key/value store database using C++ STL containers and an Xml document class which helped to read, write and persist database contents in a Xml file.
  - ✓ The project supported various functionalities like adding key/value pairs, editing text metadata, replacing existing values instance with a new instance and, addition and deletion of relationship with other key/value pairs.
  - ✓ Implemented a query mechanism that supported various queries for the contents of the database.
- **Design, simulation and synthesis of a CPU using Synopsys Design Compiler** **Aug 2016 – Dec 2016**
  - ✓ Implemented a 16-bit CPU which included a fully functional program counter, controller, registers and an ALU with a shifting function using VHDL. The entire code was synthesized using Synopsys Design Compiler as a final project for the course Digital Machine Design.