Immanuel Amirtharaj

10480 Madera Dr. Cupertino, CA 95014
Phone Number: (408)-887-4946,
Email Address: immanuelda@gmail.com
Personal Website: iamirtharaj.me
Github Profile: manny1995

SUMMARY OF QUALIFICATIONS
- **Languages:** C++, Objective C, C, Java, Python, SQL, Swift, JavaScript, PHP, R
- **Coursework:** Data Structures, Algorithms, Database Systems, Computer Networks, Data Mining, Web Search, Cloud Computing, Operating Systems
- **Development Technologies :** Cocoa Touch, CloudKit, MapKit, Core Bluetooth, Node JS, D3 JS, Angular JS, Git, SVN, iOS, watchOS, macOS, Windows 10

EDUCATION
Master of Science in Computer Science and Engineering at Santa Clara University
- **Expected Graduation:** June 2018, Data Science Track, GPA: 3.5

Bachelor of Science in Computer Science and Engineering at Santa Clara University
- Graduated June 2017, Minor in Mathematics, GPA: 3.328

WORK EXPERIENCE
Graduate Research Assistant at Santa Clara University, - June 2017 - Present
- Implemented a server with a Raspberry Pi to collect network information from iOT clients
- Currently implementing Matlab scripts for data analysis

Software Engineering Intern at Apple Inc. (FileMaker) - June 2016 - September 2016
- Implemented the user interface and client side logic for the new OAuth 2.0 feature for FileMaker Go 16
- Collaborated with both QA and design teams for implementation and testing.
- Fixed various bugs throughout the codebase and updated deprecated APIs.
- Gained experience in UIKit, iOS application states, localization, and accessibility.

Software Engineering Intern at WeatherSphere - April 2015 - September 2015
- Reimplemented the UI for the existing Fishing Spots application for its next release.
- Implemented new features including an updated newsfeed and a new profile page.
- Integrated the application with internal web APIs for data retrieval.
- Utilized Grand Central Dispatch and and NSCache to increase responsiveness and decrease loading time.

PROJECTS
Linda Coordination Model for Distributed Systems
- Created a Java implementation of the Linda model for a distributed system.
- Supports adding of new hosts, as well as read, write, and delete operations on data.
- Implemented consistent hashing to make the system redundant and fault tolerant.

Netflix Challenge
- Used Python to implement cosine, pearson, and adjusted cosine collaborative filtering algorithms to predict users ratings for movies.
- Implemented a custom weighted average algorithm to further increase accuracy.
- Achieved a 0.7548 mean absolute error from a dataset of 200 users and 1000 movies.

Project SeetiTel
- Won 2nd place at Santa Clara University's Broncohack Hackathon
- Worked with a team of 2 other people to build SeetiTel, an iOS app which serves as an anonymous and secure forum for whistleblowers to share illegal activity via SMS.
- Implemented an iOS front end and utilized a REST API for data retrieval.