## **ACHINTYA PILLAI**

Buffalo, NY 7163482003 apillai@buffalo.edu

#### **OBJECTIVE**

**OPT visa holder** seeking entry level position as a **software programmer** 

#### **EDUCATION**

UNIVERSITY AT BUFFALO, THE STATE UNIVERSITY OF NEW YORK Bachelor of Science, MAY 2018

Computer Science Engineering

GPA 3.2/4.0

#### **EXPERIENCE**

STATE UNIVERSITY OF NEW YORK AT BUFFALO, Buffalo, New York Teaching Assistant (Intro to Programming Languages & Digital Systems), 02/2017 – 12/2017 & 02/2018 – 05/2018

- Successfully assisted and taught engineering courses CSE241, CSE113 and CSE101 with the head Professor.
- Taught Digital systems, Introduction to Programming and General Introduction to Computing with Dr. Jennifer Winikus
- Adapted to lecture materials for different course and was able to teach in a very active manner.
- Developed interactive skills with different students.
- Focused on topics such as Data Structures, Object Oriented Programming concepts, K-Maps, test benches and used software such as processing, eclipse and Verilog.

## RENT MI, Buffalo, New York

## **Android Application Developer Intern**, 12/2016 – 01/2017

- Developed the first android version of the company application for user interaction.
- Completed fragmentation for tabs on the application such as Home, Listing, user messages, my profile and profit.
- Used Android Adapter API in the application to construct the view for the data.

# STATE UNIVERSITY OF NEW YORK AT BUFFALO, Buffalo, New York Research Assistant, 12/2015 – 05/2016

(Project lead by Dr. Bina Ramamurthy)

- This project was about building and implementing a plan which enabled the University to create a fully functional and dynamic virtual environment.
- Analyzed building structure, collected blueprints for buildings and designed a virtual space for university which matched the campus.
- Designed the webpage and worked with a team to make the website with bootstrap.
- Integrated the online application for participants who wish to join the project to the website.
- Used scripts in PHP to send automated emails to participants for the project.

### CERTIFICATION

Oracle Certified Associate Java SE 8 programmer

#### **PROJECTS**

**DRONE COLLISION AVOIDANCE SYSTEM (C):** A system which helps detect and avoid collisions between drones.

- Used concepts: Threading, Semaphores and Manhattan movement pattern.
- The capability of drones includes: takeoff, deliver, return, avoid collision
- When a drone requests landing, if a landing space is available it is allocated. If not, the drone keeps hovering around in a holding pattern. All the drones requesting landing are queued up and are served first come first serve basis.
- Drones had to operate concurrently. Hence I simulated them using concurrent control structures such as pthreads

**UB MINECRAFT-HACKATHON** (PHP, Python, HTML5): Helped organized the event by helping in conducting Minecraft server load tests using scripts and made script to send automated emails using PHP.

- Designing and managing the website for the Hackathon.
- Building and integrating the registration form for the Hackathon with the main website.
- Helped with gathering information about each building and its floor-plans and published them on the website.
- Created a photo gallery in the website for people to look back and see how they enjoyed the event.
- Helped with publications and social events with the publicity team for the whole event.

**SMART MIRROR:** A smart mirror with voice recognition with an embedded system

- Mirror is capable of showing/telling you the time, latest news, weather updates and it had small daily notes displayed to the user.
- The team and I integrated google voice with the mirror, with that addition we were able to set reminder, calendar dates, alarms and use all other features google voice provided with their services

FitPal (Java): Android application search "Fitpal by Achintya" on playstore

- Created a simple layout and design for an android platform through Android Studio.
- Used a MVC Software Design Pattern to architect the application and make different components reusable.
- Bridged the data structure and the GUI for the final product.
- Used User Inputted data to calculate the BMI and give them the results.
- Compared the results with the average BMI readings in the area and gave the user a rough idea w here they stand with their fitness goals.

Backend developer for a time management app on the android play store. (Application on playstore is chYour)

- Designing and managing the server end tasks.
- Helped in making the PHP scripts for automation of emails to users.
- Made a structure for storing the data from the user end.
- Send data from the client side to the server using JSON and REST API

## SKILLS SOFTWARE

Java, Python, C, C++, SQL, XML, XQUERY, SPARQL Eclipse, PyCharm, Verilog, Processing, pgAdmin, Editix-XML, exist-db, MATLAB