

# ACHINTYA PILLAI

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<b>OBJECTIVE</b>	Seeking an entry level position as a <b>software programmer</b>
<b>EDUCATION</b>	UNIVERSITY AT BUFFALO, THE STATE UNIVERSITY OF NEW YORK <b>Bachelor of Science</b> , MAY 2018 <b>Computer Science Engineering</b> <b>GPA 3.2/4.0</b>
<b>EXPERIENCE</b>	<p><b>STATE UNIVERSITY OF NEW YORK AT BUFFALO</b>, Buffalo, New York <b>Teaching Assistant (Intro to Programming Languages &amp; Digital Systems)</b>, 02/2017 – 12/2017 &amp; 02/2018 – 05/2018</p> <ul style="list-style-type: none"><li>• Successfully assisted and taught engineering courses CSE241, CSE113 and CSE101 with the head Professor.</li><li>• Taught Digital systems, Introduction to Programming and General Introduction to Computing with Dr. Jennifer Winikus</li><li>• Adapted to lecture materials for different course and was able to teach in a very active manner.</li><li>• Developed interactive skills with different students.</li><li>• Focused on topics such as Data Structures, Object Oriented Programming concepts, K-Maps, test benches and used software such as processing, eclipse and Verilog.</li></ul> <p><b>RENT MI</b>, Buffalo, New York <b>Android Application Developer Intern</b>, 12/2016 – 01/2017</p> <ul style="list-style-type: none"><li>• Developed the first android version of the company application for user interaction.</li><li>• Completed fragmentation for tabs on the application such as Home, Listing, user messages, my profile and profit.</li><li>• Used Android Adapter API in the application to construct the view for the data.</li></ul> <p><b>STATE UNIVERSITY OF NEW YORK AT BUFFALO</b>, Buffalo, New York <b>Research Assistant</b>, 12/2015 – 05/2016 (Project lead by Dr. Bina Ramamurthy)</p> <ul style="list-style-type: none"><li>• This project was about building and implementing a plan which enabled the University to create a fully functional and dynamic virtual environment.</li><li>• Analyzed building structure, collected blueprints for buildings and designed a virtual space for university which matched the campus.</li><li>• Designed the webpage and worked with a team to make the website with bootstrap.</li><li>• Integrated the online application for participants who wish to join the project to the website.</li><li>• Used scripts in PHP to send automated emails to participants for the project.</li></ul>
<b>CERTIFICATION</b>	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 where 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