ASHWIN CHITOOR

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Seeking a Full-Time Software Engineering Position

EDUCATION

Rensselaer Polytechnic Institute, School of Science — **Troy, NY**

Bachelor of Science, ***Computer Science*** — *2019 -* ***Anticipated Grad. May 2022***

Minor, Business Management

GPA: *3.84,* Upsilon Pi Epsilon Chapter Member, Dean's Honor List: *Fall 2019, Spring 2020, Fall 2021, Spring 2021*

Relevant Coursework: Data Structures, Foundations of Computer Science, Computer Organization, Introduction to Algorithms, Operating Systems, Principles of Software, Linear Algebra, Graph Theory

SKILLS

Programming Languages: Java, C++, C, HTML/CSS, JavaScript, Python, Swift, Bash
Frameworks and Libraries: JUnit, Akka, React, Bootstrap, Node.js, Firebase
Tools: Git, Linux, Docker, Gradle, Maven, Jira, Jenkins, SonarQube

EXPERIENCE

Alert Innovation — **North Billerica, MA**

RCS Software Engineer Intern — *June 2020 – August 2020, May 2021 – August 2021*

- Collaborated within an **Agile** environment to improve automated grocery order picking
- Supported **Java** development of robot control system using reactive **microservices**
- Developed Event-Driven Distributed Systems using **Akka** asynchronous actors and messaging
- Implemented serialization and deserialization of **TCP** messages
- Built state machines to be used for order transferal of 20+ totes
- Implemented webserver **REST** APIs in order to send and receive data from the system
- Create software unit-tests, integration tests, and acceptance tests using **Junit**

RPI Advising & Learning Assistance Center — **Troy, NY**

Data Structures Tutor — *January 2020 – May 2021*

- Tutored 100+ Data Structures students through **C++** code review and debugging
- Taught fundamental concepts such as Arrays, Linked-Lists, Trees, and HashMaps

Analog Devices — **Wilmington, MA**

Robotics Software Engineer Intern — *July 2018 – August 2018*

- Collaborated with 5 engineers to build a Radio-Ranging robot to test ADI sensors
- Implemented robotic autonomous driving using **ROS** framework
- Completed full product analysis of micro-controller board prior to release

FIRST Robotics Team FRC 4909 — **Billerica, MA**

Software Lead — *September 2015 – June 2019*

- Led a group of 15+ students and mentors to develop a robot software for competition
- Created automatic subsystem setpoints using **PID** controllers
- Developed color-tracking cameras using **OpenCV** to be used to follow field objects
- Taught students the fundamentals of **Java** and **Object-Oriented** design

PROJECTS

Cheapskate — **github.com/ashwinc12/Cheapskate**

- Developed a **native** IOS app that allows roommates to track expenses on a synchronized list
- Implemented real-time database updates using **Firebase**

Poll Buddy — **github.com/PollBuddy/PollBuddy**

Rensselaer Center for Open Source (RCOS) Member

- Developed an online polling platform for use by RPI faculty and students
- Used **React.js** and **Bootstrap** to create responsive frontend pages
- Created fully specified **REST** backend built with **Node.js**, **Express.js,** and **MongoDB**

CourseHub — **github.com/ashwinc12/CourseHub**

- Created an automatic lecture recording system for use by college lecture halls
- Automated a **Raspberry Pi** to record lectures and upload them to a **Flask** frontend