

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

<u>Relevant Coursework:</u>	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 an iOS app using **Swift** 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