Tarun Boddupalli

US Citizen

tarunbod@gmail.com | Edison, NJ | (732) 692-4957

EDUCATION

Rutgers University, New Brunswick, NJ. B.S. Computer Science, Minor in Mathematics

GPA: 3.7

Coursework: Data Structures, Design & Analysis of Algorithms, Discrete Structures, Computer

Architecture, Operating Systems

<u>Honors</u>: Dean's List

Edison High School, Edison, NJ.

GPA: 3.8

Awards: National Honors Society, Science National Honors Society, AP Scholar with Distinction,

PSAT/NMSQT Commendation

SKILLS

<u>Languages</u>: Java, HTML5/CSS3/JS, Python, C, C++, Ruby, Bash, Kotlin <u>Technologies</u>: Node.js, React/React Native, MongoDB, MySQL, Ruby on Rails

WORK EXPERIENCE

Full Stack Software Engineer at Aersys, Inc., Piscataway, NJ. (11/19 - Present)

- Developing systems software to operate an automated robotic parcel management solution
- Creating internal and external UIs for dashboards and mobile applications using React.js,
 React Native, and Node.js
- Designing and implementing a publisher-subscriber architecture in Kotlin for communications between an array of hardware devices
- Using C/C++ to interface with hardware sensors and robotics controllers to perform low-latency motorized operations
- Using Python + OpenCV for computer vision applications in object and text detection
- Managed two interns over the course of a summer internship program

<u>Student Programmer</u> at <u>Rutgers Lab of CS Research</u>, Piscataway, NJ. (10/18 - Present)

- Part of a team that maintains Rutgers AutoLab, a web application that university students and faculty use to organize computer science courses and assignments
- Programming in Ruby with the Ruby On Rails framework paired with a MySQL database
- Using Docker to manage and run the different services required for the website
- Writing scripts in Python and Bash to automate regular workflows and application deployment procedures
- Previously (from 10/18 5/20) maintained and optimized (up to 200% improvement in some cases) SignStream, a desktop application written in Java that provides ASL video annotation capabilities
- Programmed in Java using the Swing desktop framework

Computer Technician Summer Intern at Edison Twp. BOE, Edison, NJ. (7/16 - 8/18)

- Had to troubleshoot hardware problems with student issued laptops.
- Maintained and updated software on school computers per district's guidelines.
- Wrote some basic shell scripts to automate software installation processes (sped up daily workflow for the entire school district by 50%).

PROJECTS

<u>IsThatGuvInMvClass</u>

- Led a group of 3 in creating a webapp to show students their classmates for the upcoming semester
- Learned about graph search algorithms, storing data in a MongoDB persistence layer, and authenticating users with JSON Web Tokens
- Optimized the Node.js backend to handle traffic from over 400 unique users on a Heroku free tier

eLaser

- Worked with a partner to develop a presentation tool that translates accelerometer data from a mobile device into display positions for a visual marker (functions as a laser pointer)
- Used vanilla JS and websockets for low-latency communication between the presentation device and the user's smartphone, as third-party libraries added too much overhead
- Implemented a real-time Q&A system to query audience feedback quickly and easily

Dr!ve

- Worked with a team of four to create a mobile app that alerts distracted drivers at the wheel
- Using Intel's RealSense 3D camera and its SDK, wrote C# code to track eyelid movements and assess whether a driver is falling asleep or potentially intoxicated.