Sam Roquitte

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Education

Georgia Institute of Technology | Atlanta, GA *GPA: 3.42/4.0 | August 2018 – May 2022*
Candidate for Bachelor of Science in Computer Science
Relevant courses — Computer Organization and Programming, Linear Algebra, Discrete math, Systems and Networks

Middleton High School | Middleton, WI *GPA: 3.8/4.0 | May 2018*
Dual enrolled at University of Wisconsin Madison — Programming II & III: Data Structures & Algorithms in Java

Experience

Akitabox | Madison, WI *Summer 2017 & 2018*
Software Development Intern
SaaS startup providing cloud-based asset tracking, blueprint storage, and maintenance tools to building managers.

- Reduced bug fix turnaround time by adding server crash and error reporting to a Slack bot using AWS CodeDeploy SDK
- Improved consumer value by working with another developer to add a new building statistics page that allows users to see rich data on the performance of their building and improve efficiency

Skills

Programming: Java, JavaScript, Node.js, HTML, CSS, PHP, SQL, Arduino, Python
Software: Node.js, MongoDB, MySQL, Redis, Nginx, Apache2, REST APIs, Github & git CLI, SolidWorks
Platforms & Networking: Linux (Ubuntu, Debian), DNS configuration, Domain & subdomain configuration, SSL certificates

Projects

Youtube Downloader *2018 – present*

- Built a website that takes a video url, downloads it, and organizes it into the correct directory structure
- Used the Spotify API to get song metadata based on video title and set mp3 ID3 tags
- Created with mdbootstrap, Node.js, express, socket.io, and shell scripting

eL (MakeHarvard Hackathon) *2018*

- Built a smart lighting system for electric longboards that reacts to turning and braking
- Implemented a REST API to communicate data between the esp8266 based hardware and an Android app
- Winner of Sunstone Circuits MAKE it Matter prize

Animaid (MIT Reality Virtually Hackathon) *2018*

- Built an augmented reality app in Unity to allow creators to make storyboards much quicker
- Implemented a neural network to take in 2D sketches from multiple angles and convert them into 3D models by inferring missing details

Overherd (HackGT Hackathon) *2018 – present*

- Worked in a team to build a location based social media app with Ionic, Node.js, Angular, and MongoDB
- Used Google maps API and geospatial MongoDB queries to tie data to the user's location

Split.News *2018 – present*

- Managing the development of an app that allows users to engage in civil discussion about political topics
- Sends automated emails to collect votes on topics and allows users to send in comments

Sandman 2015 – 2017

- Led a team of 5 developers to build an app using PHP and MySQL that allows for quick and easy collection of competition data
- 50 registered users and over 70,000 data points collected
- Wrote automated strategy guide tool to summarize data and highlight weak points in the opposing teams

Part System 2016 – 2017

- Built an inventory management system from scratch using PHP and MySQL
- Allows robotics team to proactively order parts and track robot subsystems through development
- Includes secure pages with OAUTH2 "Sign in with Slack" to keep designs and files private
- CAD file management system allows design team to easily share files with fabrication team

Leadership / Activities

Robojackets Intelligent Ground Vehicle Competition Team | Atlanta, GA *2018 – present*
Software team (2018)

- Working with a team to build a semantic segmentation CNN with pytorch to recognize barrels and lines on the course
- Running on an onboard custom-built computer and connected to the rest of the system using ROS
- Trained with labeled images from a parking lot and images from the grass (actual course will be grass)
- Allows the team to run the robot in multiple different environments and iterate on design much quicker

Robojackets Outreach | Atlanta, GA *2018 – present*
Mentor (2018), Event volunteer (2018)

- Taught high school students basic electronics skills and how to connect everything on their robot
- Volunteered at FIRST Robotics Competition events