

# ROHIT BARICHELLO

rohitbarichello@gmail.com | linkedin.com/in/rohitbarichello

## EDUCATION

---

### Texas A&M University

*B.S. in Computer Engineering, Minor in Mathematics*

College Station, Texas

August 2018 – December 2022

- **Relevant Courses:** Distributed Systems, Computer Networks, Operating Systems, Cloud Computing, Parallel Computing

## TECHNICAL SKILLS

---

**Tools:** TCP Networking, PostgreSQL, MongoDB, AWS, REST APIs, gRPC, Node.js, Git, Docker, React.js, Django

**Languages:** Python, C/C++, Java, Bash, Go, JavaScript/Typescript, SQL

## PROFESSIONAL EXPERIENCE

---

### Georgia Tech Research Institute (GTRI)

*Software Engineer Intern*

Atlanta, GA

August 2022 – December 2022

- Built a hardware testing environment, enabling radar functionality verification for **4** defense contractors
- Contributed **2** full-stack features to a monolithic codebase using Django and React.js, improving observability
- Redesigned the team's deployment and unit-testing procedure using Daphne servers, Selenium, and the Django Test Framework, increasing CI/CD efficiency by **40%**
- Created a log analysis solution to facilitate vendor audits and standardize information entering GTRI's message-viewer app from multiple sources

### Capital One

*Software Engineer Intern*

McLean, VA

June 2021 – August 2021

- Developed a credit card pre approval tool for small business owners, **doubling** the card application retention rate
- Optimized data consumption from internal microservices, reducing render time for key pages by **60%**
- Implemented efficient decisioning logic based on user data to recommend cards to capitalone.com users

### iSenpai

*Software Engineer Intern*

Reston, VA

May 2020 – August 2020

- Built the backend and API of a tool that scores and indexes websites based on their level of web accessibility
- Automated the website scoring procedure using Python, increasing the data collection rate by **250%**
- Refactored a legacy codebase to mitigate security threats, including injection, poor logging, and data exposure
- Wrote **12** pages of documentation to outline the tool's architecture and data flow, facilitating future contributions

### SpaceCRAFT VR

*Research Technician*

College Station, TX

September 2019 – December 2019

- Improved the realism of images rendered in a VR space mission simulation by emulating CMOS camera noise with Python

## PROJECTS

---

### Hand-Controlled Quadcopter

- A computer-vision-based quadcopter controlled with hand movements instead of a remote controller
- Built from scratch, integrating a multithreaded Python script, OpenCV, PPM signal communication protocol, a Raspberry Pi, a flight controller board, and a hand-gesture detection algorithm

## ACTIVITIES & LEADERSHIP

---

### TAMUhack

*Logistics Director*

College Station, TX

March 2020 – March 2022

- Organized logistics and day-of operations for **4 24-hour** hackathons with **750+** attendees

### Student Engineers' Council (SEC)

*Systems Administrator*

College Station, TX

December 2020 – December 2021

- Led a committee of **14** in the development of SEC technologies, including **10** websites and automation tools
- Designed technical solutions for the engineering career fair, servicing **15,000** student