Samuel Rodriguez

samuelrprofessional@gmail.com SamRod33 813-720-9176 samuel-rodriguez33

Education

Cornell University, College of Engineering **Expected May 2023**

B.S. Computer Science and Minor in Business Management | GPA: 3.39 / 4.00

Relevant Coursework: Analysis of Algorithms, Data Structures, Machine Learning, Computer Networks

Skills

- Python, Kotlin, Java, R, OCaml, JavaScript, GraphQL, Julia
- Firebase, Litho, Linux, Android Studio, Unity
- Scikit-Learn, PyTorch, TensorFlow, Pandas, NumPy, NLTK, Jupyter Notebook

Experience

Meta, *Software Engineer Intern* **May 2022-Aug. 2022**

- Engineered copying and sharing stories using GraphQL, Litho Framework, and Meta's internal libraries on Messenger for mutual friend conversations encouraging Meta's goal of increasing private sharing.
- Established story rings using Litho Framework, Android API, and Meta's internal tools on Messenger Story's seen sheet to drive more story engagement boosting connectivity amongst users.
- Conducted Lead QA testing, public experiments, and gatekeeping on story sharing and rings features.

Google Software Product Sprint, *Software Engineer* **Feb. 2021-May. 2021**

- Developed a chrome extension that gives facts and articles about trending word topics
- Built Firebase Realtime Database for 10 GB-worth data storage solution
- Implemented Java servlets to handle HTTP requests

Personal Projects

Unmanned Ground Vehicle (UGV), *Software Engineer* **June 2021-July 2021**

- Invented UGV with Fusion 360 and Raspberry Pi that is controlled via internet connection
- Built Django development server to host controller website to communicate with Raspberry Pi
- Featured Ngrok to implement secure tunneling service to control UGV with internet connection
- Constructed original robot design with Fusion 360 to feature 4 motors, camera module, Pi, and motor driver controller

Research

Cornell Virtual Embodiment Lab**,** *Research Assistant* **Aug. 2022-Present**

- Engineered 30GB worth of custom Unity virtual reality enabled environments to assess how nonverbal behavior as rendered in virtual environments affects collaboration and teamwork.
- Managed weekly 4 hour experiments focused on the clinical applications of virtual reality.

Hyperharmonic Centrality Research**,** *Research lead* **June 2020-Aug. 2020**

- Lead a three-person research team on the computation of harmonic centrality on higher order networks with concepts from graph theory, linear algebra, and network analysis.
- Applied research to a 143 node and 10551 hyperedges sized hypernetwork in Julia
- Presented research results to the Cornell ESMI Symposium.

ExtraCurricular

Discrete Structures and Mathematics**,** *Teaching Assistant* **Aug 2022-Present**

- Led office hours for 4.5 hours weekly to help up to 20 students at a time.
- Graded 400+ weekly homework assignments and crafted solutions for 2 sets of lecture exercises.

Underrepresented Minorities in Computing**,** *Professional Development Chair* **Jan. 2022-Present**

- Gathered 100+ relevant internship, research, and on-campus career/academic-related opportunities.
- Hosted mock interview, resume building, and career panel events for over 300+ URMC members