

Education

Georgia Institute of Technology – Atlanta, GA
Bachelor of Science in Computer Science, GPA 3.92

August 2019 – May 2023
Faculty Honors, Dean's List, Zell Miller Scholar

Work Experience

Software Engineer **Applied Intuition** *June 2023 – Present*

- Developing Basis, Applied's cloud-based autonomous vehicle and ADAS verification & validation platform.

Software Engineer Intern **Snap Inc.** *May – August 2022*

- Researched in Snap's R&D division, SnapLab, on Spectacles - Snap's next generation wearable smartglasses.
- Improved computer vision models for hand tracking and pose estimation using Spectacles' camera system.
- Generated over three million frames of fully synthetic training data which reduced CV model error by 20%.
- Built and deployed load distributed Kubernetes machine learning pipelines for CV training and validation.

Software Engineer Intern **Uber** *May – August 2021*

- Worked on algorithmically modelling order costs (Core Pricing team) for Uber Eats' 80 million monthly users.
- Developed a pricing microservice which calculates delivery fees based on restaurant and customer location.
- Coded the back-end for the service with Go, Python, Hive, and Docstore (Uber's distributed SQL database).

Software Engineer Intern **The Home Depot** *January – May 2021*

- Designed and programmed an ARKit-based iOS app to scan 3D models of customers' furniture with LiDAR.
- Enabled the app to generate and save high fidelity meshes from the scans with ~2cm-wide polygon faces.
- Merged the meshes with AR to create real-time virtual visualizations of the customers' furniture and rooms.

Software Engineer Intern **JANUS Research Group** *June – August 2020*

- Constructed a line of computer vision sensors to monitor meters on water pumps at local farms.
- Integrated the sensors into the Google Cloud Platform, connected via LoRaWAN and cellular data.
- Created a monitoring UI with Django, InfluxDB, and Grafana for the Georgia counties managing the sensors.

University Projects & Organizations

CopyCat – Computer Vision and HCI research project which utilizes pose-estimators paired with Hidden Markov Models to translate American Sign Language (ASL) signs to aid deaf children learning ASL.

PopSign – Primary project manager of PopSign, a published iOS and Android mobile game which teaches adults ASL on their phones. PopSign is backed by Google's Accessibility Research Team and was presented at Google I/O 2023. Visit PopSign.org for links to the app store pages and recent news about the project.

GT CS Careers Club – Founder and President of the Georgia Tech Computer Science Careers Club, a registered student organization and online community of over 2,400 GT CS students. The club offers mentorship, resume workshops, mock interviews, technical interview prep, and other career-related services.

Awards

1st Place Paper – ACM CHI Conference 2021, Undergraduate Student Research Competition – May 2021.

Best Overall Presentation – Georgia Tech CoC, Undergraduate Research Symposium – April 2021.

Skills

Languages – Python, Java, Go, C++, C, C#, Swift, Bash, x86 Assembly

Technologies – TensorFlow, OpenCV, MediaPipe, SQL, Hive, InfluxDB, React, Docker, Kubernetes, Terraform

Concepts – Machine Learning, Computer Vision, Pose Estimation, Microservice Architecture, Distributed Systems, Scalable Containerization, Cloud Computing, Human Computer Interaction, Augmented Reality, Git