

# Rishab Paruchuri

U.S. Citizen | (470) 923-4886 | [rparuchuri3@gatech.edu](mailto:rparuchuri3@gatech.edu) | [linkedin.com/in/rishab-paruchuri](https://www.linkedin.com/in/rishab-paruchuri) | [github.com/RishabParuchuri](https://github.com/RishabParuchuri)

## EDUCATION

### Georgia Institute of Technology

*Bachelor of Science in Computer Science | GPA: 4.0/4.0*

Concentrations: Systems & Architecture and Information Internetworks

Expected Graduation - May 2026

Atlanta, GA

## EXPERIENCE

### Software Engineering Intern - Capital One

*Technology Internship Program*

June 2025 – Present

McLean, VA

### Software Developer - Bits of Good | Georgia Tech

*Hope For Haiti*

Dec 2024 – Present

Atlanta, GA

- Engineered a high-volume backend CSV/XLSX ingestion system with live previews and error feedback, enabling upload of 5,000+ records in Next.js/PostgreSQL
- Streamlined workflows by building donor and registration portals in React/Tailwind, reducing admin time by 50%
- Built scalable REST API with Prisma ORM enabling search/filtering for 100,000+ items and \$30M+ inventory

### Founder & Software Engineer - Campus Crate

Nov 2024 – Present

- Launched student storage marketplace using Next.js, Supabase, PostgreSQL, Stripe; used by 40+ students
- Developed secure REST endpoints with address protection and user authentication using Supabase Auth
- Designed relational SQL schema with geospatial indexing (PostGIS) and integrated Google Maps API for location-based listing search

### Data Science and Analytics Intern - John Deere

*Intelligent Solutions Group*

May 2024 – Aug 2024

Urbandale, IA

- Developed patented machine learning algorithms in Python/PySpark using clustering and image segmentation to generate guidance zones from historical machine path data for AutoPath/AutoTrac autonomous guidance tools
- Spearheaded delivery of validation sets to multiple agricultural organizations (100,000+ acres), earning deployment approval in John Deere Operations Center with support for 650,000+ machines
- Built CNN architecture using satellite imagery and digital elevation model rasters to detect agricultural terraces

### Full-Stack Software Engineering Intern - Women Entrepreneurship Hub

Jun 2022 – Jul 2022

- Crafted responsive web pages with JavaScript, HTML, CSS (Bootstrap) and integrated them with a Node.js/Express backend, enabling access to incubator resources for 5,000+ women entrepreneurs
- Designed intuitive UIs for the Udyamika Platform, improving engagement and rural accessibility

## PROJECTS (SEE GITHUB/LINKEDIN)

### MiniRedis | C/C++, Docker

- Engineered a high-performance, Redis-inspired in-memory key-value store in C++, containerized with Docker
- Implemented custom event loop using `poll()`, non-blocking I/O, and binary-safe protocol parsing
- Supported Redis-style pipelining and REPL interface, with efficient in-memory data structures (hash maps & lists)

### Spotify Wrapped Social App | Java, Firebase, Spotify Web API

- Built a social Android app for sharing and comparing Spotify Wrapped stats with friends via a dynamic feed
- Integrated Spotify Web API, Firebase Auth, and NoSQL Firestore to enable real-time user experiences
- Led team of 5 in Agile (Scrum) sprints; implemented CI/CD with GitHub Actions for testing and deployment

### Computer Vision Geolocalization - Advisor: Prof. Susan Fox, Macalester | Python, TensorFlow, OpenCV

- Architected a convolutional neural network using VGG16 and transfer learning to predict city location from images
- Enhanced prediction accuracy by optimizing image preprocessing and fine-tuning deep learning model architecture

## TECHNICAL SKILLS

**Languages:** Python, C++, Java, JavaScript, TypeScript, SQL (PostgreSQL), MATLAB, HTML/CSS, Bash, Go

**Frameworks/Libraries:** React, Next.js, Node.js, Flask, Spring Boot, Prisma, Tailwind, NumPy, Pandas, MongoDB

**Developer Tools:** Git, Docker, GitHub Actions, Supabase, Stripe, AWS, Azure, Google Cloud Platform, Postman

**Coursework:** Data Structures, Algorithms, Operating Systems, Computer Systems & Networks, Databases,

Object-Oriented Programming, Discrete Math, Artificial Intelligence, Probability & Statistics, Applied Combinatorics

## AWARDS/HONORS

**Georgia Tech Faculty Honors:** Fall 2023, Spring 2024, Fall 2024, Spring 2025

**Top 1% – 2025 IMC Prosperity Trading Competition:** Ranked in top 1% out of 12,500+ global teams