

# RAHUL DATTA

Santa Clara, CA | [rdatta@scu.edu](mailto:rdatta@scu.edu) | (925) - 725 - 9443 | [linkedin.com/in/radatta13](https://www.linkedin.com/in/radatta13) | [github.com/radatta](https://github.com/radatta) | [rahuldatta.dev](https://rahuldatta.dev)

## EDUCATION

### Santa Clara University

Santa Clara, CA

B.S. in Computer Science, Minors in Mathematics & AI

Expected, June 2027

- **Coursework:** Data Structures & Algorithms, Object Oriented Programming, Multivariable Calculus, Statistics, Discrete Math
- **Involvements:** President, Math and Computer Science Society; Alpha Kappa Psi; Chess Club; South Asian Community; ACM

## PROFESSIONAL EXPERIENCE

### MathGPT | [math-gpt.org](https://math-gpt.org)

San Francisco, CA

Full Stack AI Engineer

Apr 2025 – Jul 2025

- Architected an LLM-driven Practice-Test engine with Next.js serverless API routes, OpenAI tool-calls, Supabase (PostgreSQL), and Mixpanel Analytics that streamed 120K+ questions to 9K+ users in 30 days and increased average session length by 34%
- Implemented a streak-based engagement engine using Supabase Realtime, Next.js cron tasks, Loops email API, and Clerk Auth, automating personalized reminders and lifting seven-day retention from 11% to 18% among 25K+ active users
- Optimized OpenAI function-call pipeline on Vercel Edge by enhancing Qdrant vector search and refining backend pipelines with deterministic ordering and atomic writes, resolving chat race conditions and reducing latency by 30% and overall error rate by 20%

### Santa Clara Sports Performance

Santa Clara, CA

Data Science Intern

Jan 2025 – Present

- Automated the extraction and transformation from 2.5M+ rows of Catapult GPS tracking data from men's and women's D1 soccer teams to generate actionable risk scores, enabling coaches to identify high-risk moments and proactively adjust training intensity
- Developed and refined machine learning models to analyze physiological and biomechanical data (velocity, acceleration, player load, metabolic power) for real-time injury risk prediction using Pandas, NumPy, and scikit-learn
- Collaborated with Sports Science Directors and Dr. Smita Ghosh to translate model insights into practical coaching recommendations, supporting data-driven decisions that optimize athlete health and performance

### Milio | [milio.shop](https://milio.shop)

Santa Clara, CA

Principal Software Engineer

Dec 2024 – Mar 2025

- Spearheaded the engineering and architecture of a modern e-commerce platform for collectibles, leveraging Next.js, React, TailwindCSS, Supabase, and Stripe for seamless product management, authentication, and payments
- Established robust local and cloud development workflows with Bun, Docker, and Vercel, and implemented automated database migrations and type generation to ensure data integrity and developer velocity, reducing manual CI/CD pipeline runtime by 40%
- Integrated secure Stripe Checkout and webhook handling, enabling real-time subscription management

### Revoteen | [revoteen.com](https://revoteen.com)

San Ramon, CA

Software Engineer

Jul 2022 - Jul 2024

- Led the development of a full-stack social networking platform connecting like-minded students across the globe using Next.js, Firebase, and AWS, amassing 10,000+ users across 70+ countries with 800+ opportunities (internships, projects, summer programs)
- Optimized recommendation and string-match algorithms for search and private messaging, improving user engagement by 25%
- Designed and implemented a refactor of serverless functions and APIs, reducing feed page load time by 20%

## PROJECTS

### Imaginary Ticketing | [Source Code](#)

Remote

Solo Founder & Developer

- Developed and maintained a scalable Discord ticketing bot in Python, leveraging Discord.py, Flask, SQL, and async libraries to streamline support workflow for large online communities, amassing 25,000+ users across multiple servers
- Designed an async modular architecture, reducing ticket response latency by 30% and enabling seamless integration of new features
- Implemented a CI/CD pipeline to orchestrate deployments with PM2, ensuring 99.999% uptime and zero-downtime updates

### Sheltr - Hack for Humanity 2025 Winner | [Source Code](#)

Santa Clara, CA

Software Engineer

- Architected and launched a web app that connects disaster victims with verified nearby shelters, featuring real-time filtering, reservations, and queue management powered by Google Maps APIs, winning Best Freshman Hack at SCU's Hack for Humanity 2025
- Integrated a FastAPI backend with AWS DynamoDB and Bedrock, and deployed the platform on AWS EC2 with Nginx, enabling scalable, secure data processing and authentication for both individuals and shelter providers

## SKILLS & INTERESTS

**Languages/Frameworks:** Python, TypeScript, C++, HTML/CSS, SQL, Bash, Express.js, React.js, Next.js, Node.js, Flask, REST

**Technologies:** PyTorch, Pandas, NumPy, PostgreSQL, Linux, Git, Docker, Supabase, AWS (EC2, DynamoDB, S3), Github Actions, Jira

**Interests:** Coffee Art, Western Philosophy, Food Prep, Chess, Vinyasa Yoga, Table Tennis, Puzzles, The Weeknd, Abstract Painting