

# Yathin Mrudul

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## EDUCATION

### University of California, San Diego

*B.S. in Math-Computer Science; Minor in Data Science*

La Jolla, CA

*Expected June 2027*

Relevant Courses: Data Structures & Object-Oriented Design, Computer Organization, Discrete Math & Graph Theory, Systems Programming, Principles of Data Science, Abstract Algebra, Multivariable Calculus, Linear Algebra

## TECHNICAL SKILLS

**Languages:** Java, Python, Go, C/C++/C#, TypeScript, JavaScript, Swift, SQL, HTML, CSS, Bash

**Libraries/Frameworks:** React, React Native, Node.js, Next.js, FastAPI, JUnit, PyTorch, TensorFlow, scikit-learn

**Technologies & Tools:** REST API, Git, Docker, AWS, CI/CD, GCP, PostgreSQL, MySQL, Gradle, Django

## EXPERIENCE

### Praxie AI

*Software Engineer Intern*

San Francisco, CA

*April 2025 – Present*

- Developed **10+** custom **React Native/TypeScript** pages enhancing user interaction flow for **300+** youth golfers
- Built year-end recap via **Cloud Functions** and **REST APIs**, processing **1000+** records into **15** player awards
- Developed a location-based event discovery engine with **sub-1s** search across **500+** tournaments using **geohash**
- Cut user drop-off **20%** via guest browsing with auth-gated prompts using **Firebase Auth + React Navigation**

### Alpha Kappa Psi @ UC San Diego

*Webmaster*

San Diego, CA

*March 2025 – Present*

- Migrated chapter website from Wix to full-stack app, improving response time **65%** for **2,000+** monthly users
- Created **10+** reusable React Hooks with **TypeScript**, reducing redundant state logic across **15+** UI components
- Optimized **PostgreSQL** schema with indexing and query tuning, reducing data-fetch latency **75%** across assets
- Built secure data flow using **NextAuth.js** session auth and **PostgreSQL**, serving protected data via **API** routes

### Allyvia

*Software Engineer Intern*

Los Angeles, CA

*August 2025 – November 2025*

- Built **5** real-time KPI dashboards using **React, TypeScript, Redux**, and **Django REST** for a SaaS platform
- Engineered **QuickBooks Online** integration with **OAuth 2.0 PKCE** and CDC sync across **10** entity types
- Processed CDC sync webhooks via **AWS SQS** FIFO queues with DLQ retry, reducing manual data entry by **80%**
- Containerized application stack with **Docker Compose** and **Gunicorn**, configured with health check monitoring

## PROJECTS

### [Pantry Pilot](#) | [Website](#)

*May 2025 – June 2025*

- Built full-stack recipe app leveraging the **OpenAI API** for recipe generation and personalized meal suggestions
- Built serverless recommendation API with **Firebase Cloud Functions, OpenAI GPT-3.5 Turbo** in **Node.js**
- Built real-time recipe generation pipeline using **Firebase httpsCallable** and **OpenAI** structured JSON responses
- Built **GitHub Actions CI/CD** pipeline automating **Vite** builds and **Firebase** deploys with zero downtime

### [Groove Lab](#) | [Website](#)

*April 2025 – August 2025*

- **React/TypeScript** web app for musicians to practice with synced playback, recording, and progress tracking
- Built a low-latency audio engine with **Web Audio API** and **Essentia.js WASM** for sample-accurate BPM sync
- Built audio recording pipeline with **MediaStream API** and coordinated **6+** **Redux Toolkit** async thunks
- Architected backend on **Supabase** with **PostgreSQL**, cloud storage, and **OAuth 2.0** for audio persistence

### [Plates](#)

*January 2026 – Present*

- Developing a cross platform mobile gym tracker using **Expo** and **React Native** to log lifts and visualize progress
- Containerized a **PostgreSQL** database with **TimescaleDB** and **Redis** via **Docker** to isolate dependencies
- Architecting a **RESTful API** using **Fastify** and **Prisma ORM** handling workout CRUD and analytics endpoints
- Integrated **TimescaleDB** extension to optimize time-series queries for workout tracking and progress data