

Yathin Mrudul

San Diego, CA | yathinm@gmail.com | 916-518-6480 | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of California, San Diego

B.S. in Math-Computer Science, Minor in Data Science

La Jolla, CA

Expected 2027

Relevant Coursework: Data Structures & Object-Oriented Design, Computer Organization, Multivariable Calculus, Linear Algebra

SKILLS

Programming Languages: Java, Python, JavaScript, TypeScript, HTML, CSS, SQL, LaTeX, Bash, C#, C++

Libraries/Frameworks: React, React Native, Pandas, Tailwind, NumPy, Node.js, Flask, Next.js, Node.js, CI/CD, Agile

Technologies & Tools: Git, Figma, Google Suite, Google Cloud Platform, OpenAI, PostgreSQL, Firebase, Docker, Gradle

PROFESSIONAL EXPERIENCE

Allyvia, Software Engineer Intern

Remote | August. 2025 - Present

- Engineered core business platform features using **React**, **TypeScript**, and **Django**, delivering dashboards and financial reporting
- Integrated **third-party APIs**, including **QuickBooks**, **Square**, and **Google Calendar**, automating accounting and POS syncing
- Assisted in containerizing the full application stack (**Django**, **PostgreSQL**, **Redis**) with **Docker**, streamlining the **CI/CD pipeline**
- Collaborated with product team within an **Agile** workflow, improving **client UX** from feedback, reducing support tickets by **25%**

Praxie AI, Software Engineer Intern

Remote | April. 2025 - Present

- Developed **10+** custom **React Native** pages in **TypeScript**, enhancing the complete user interaction flow for **300+** youth golfers
- Streamlined tournament discovery by implementing the **Google Maps API** to filter tournaments based on their current location
- Reduced new user drop-off by **20%** by overhauling the **onboarding process**, implementing a new flow to boost engagement
- Strengthened **Firebase** data operations, enforcing stricter input authentication protocols, lowering backend error rates by **~15%**

UCSD Alpha Kappa Psi, Webmaster

La Jolla, CA | March 2025 - Present

- Enhanced chapter website response time by **65%** for **400+** monthly users by migrating from Wix to a full-stack application
- Developed **10+** custom **React Hooks** with **TypeScript** encapsulating complex state logic promoting high component reusability
- Reduced data-fetching latency by **75%** through the implementation of an optimized **PostgreSQL** database schema for all assets
- Architected secure session-based data flow, fetching protected **PostgreSQL** data via **NextAuth.js** authenticated **API** server routes

City of Sacramento, Information Technology Department Intern

Sacramento, CA | June 2023 - August 2023

- Imaged and deployed 30+** devices, standardizing **OS** and network configurations; improved readiness, reduced setup errors **20%**
- Resolved **25 IT+ support tickets** by diagnosing and troubleshooting a wide range of **hardware, software, and connectivity issues** for city employees. Delivered timely solutions that reduced employee downtime by **30%**, enhancing overall productivity
- Collaborated closely with a **15-member IT team** to streamline ticket resolution processes, improving full response time by **5%**

PROJECTS

[Pantry Pilot](#) | Typescript, React, Firebase, GCP, OpenAI

May - June 2025

- Developed a personalized recommendation engine by creating a robust, scalable **Node.js serverless function** via **Google Cloud Platform** that analyzes user ingredient frequency data from **Firestore** to generate tailored recipe suggestions via the **OpenAI API**
- Utilized **OpenAI GPT-3.5 Turbo API** via **Firebase Cloud Functions** to provide users with recipes based on their ingredients
- A full-stack web application, deploying the **Material-UI** frontend and **Node.js** serverless backend through a **CI/CD pipeline**

[Groove Lab](#) | Typescript, React, Supabase, Web Audio

August 2025 - Present

- Engineered a **low-latency** audio engine with the **Web Audio API** and implemented BPM detection via **Essentia.js WASM**, enabling multi-track playback and metronome sessions with sample-accurate timing, and **OfflineAudioContext-based** mixdown
- Architected a scalable backend on **Supabase** with **PostgreSQL**, **Storage**, and **OAuth 2.0** authentication for audio persistence
- Implemented microphone capture pipeline using **MediaStream**, **ScriptProcessor**, peak normalization, and **lamejs** MP3 encoding

[NBA Draft Hub](#) | Typescript & React

April - May 2025

- Designed and deployed a fully responsive NBA draft analytics web application using **React**, **TypeScript**, and **Vite** to optimize
- Built dynamic player profile pages with **React Router**, enabling real-time stat toggling (**per-game / total**) for **60** draft prospects
- Engineered a **custom data pipeline** using local **JSON files** to manage and display draft prospect stats, ensuring efficient filtering

[NBA MVP Ranker](#) | Java, Python & Pandas

Jan 2025 - April. 2025

- Developed a data-driven MVP ranking tool using **Python** and **Pandas** to adeptly analyze **300+ NBA player statistics** from data
- Filtered and efficiently cleaned raw CSV data** to exclude low-activity players, improving ranking relevance by nearly **40%**
- Integrated a dynamic **Java Swing UI** to visually display ranked MVP results, allowing users to interact with and view player data