Pranay Gupta

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Education

University of Michigan — College of Engineering **Ann Arbor, MI**

B.S.E. in Computer Science, B.B.A in Business Administration *GPA: 3.60/4.00*

- **Course Highlights:** Distributed Systems, Operating Systems, Software Engineering, Algorithms and Data Structures, Computer Organization/Architecture, Programming, Discrete Mathematics, Business Strategy
- **Activities:** V1 Michigan (Head of Recruitment and Internal), Michigan FinTech (Algo-Trading Team Developer), Ross Business + Tech

Experience

Ann Arbor Spark **Ann Arbor, MI**

Full Stack SWE Intern *June 2024 – Present*

- Developed a full-stack app using Next.js, Make.com, Salesforce API, and Google OAuth to enable hundreds of startup clients to automatically retrieve and modify vendor information, saving 1200+ hours of labor and $50,000.
- Streamlined data organization by consolidating vendor, startup, and entrepreneur database for reliable access with prototype seeing 25% growth in clients year-over-year.
- Worked directly on a platform that directs midwest high-growth startups to the Ann Arbor startup ecosystem, providing consultants, funding, incubators, partnerships, and networking to accelerate growth.

V1 Michigan **Ann Arbor, MI**

Head of Product Studio + Recruitment *January 2023 – Present*

- Led the recruitment cycle, managing over 200 applicants per cycle and conducting interviews to select top candidates, forming a strong Product Studio cohort of the brightest minds on campus.
- Organized and executed major events, attracting over 300 attendees, providing networking opportunities and showcasing the work of student startups and builders.
- Scaled V1 Michigan, the largest community of student builders on campus, tripling its size and increasing member retention by 60%, fostering a supportive and thriving environment.
- Mentored over 60 students, helping them transition from students to builders by guiding them in building and launching technical products, offering personalized support and feedback to turn ideas into viable projects.

AiPi Solutions **Ann Arbor, MI**

Machine Learning Engineering Intern *May 2023 – August 2023*

- Launched a full-stack app powered by an ML pipeline integrating OpenAI's GPT-3 model to intelligently extract and edit legal documents and NDAs, achieving 95% training accuracy with lawyers' verification.
- Led development and deployment of web app, leveraging Next.js and Tailwind CSS, streamlining user interactions for document uploads/downloads and AI-assisted editing.
- Applied MLOps to cleanse training data to fine-tune GPT's response, and implemented Mammoth.js and Formidable for robust document parsing and secure file uploads.
- Increased processing speed by 10x for large datasets through running Python scripts to automate data formatting.

Projects

College Org Recruiting Platform **May 2024 – Present**

- Developed a recruitment platform using Next.js and Supabase, enabling organizations to manage recruitment cycles, applicants, and user authentication seamlessly, integrating Google OAuth for streamlined user access.
- Implemented features including CSV file uploads for applicant data, dynamic organization and recruitment cycle selection, and real-time data with React Contexts, API Routes and hooks for state management.

Thread Library **February 2024**

- Implemented a kernel level C++ thread library on Unix, handling CPU booting, thread management, interrupts, atomicity, and FIFO scheduling order. Designed and implemented spin-locks, mutexes, conditional variables utilizing advanced Unix context management.

Multithreaded Network Fileserver **April 2024**

- Built a heavily concurrent, crash-consistent network file server supporting multiple users and nested files/folders.
- Utilized committing writes to enable crash consistency, Boost threads and reader-writer locks to optimize for maximum concurrency, and POSIX sockets alongside error-checking to enable network communication.

Skills

Languages: C/C++, JavaScript, Python, Typescript, HTML/CSS, Java, Matlab
Technologies: React, Next.js, PostgreSQL, MySQL, React Native, Node.js, FastAPI, Supabase, R Studio, Django, Git
Interests: Cooking, Weightlifting, Investing, Rafting/Kayaking, Ziplining, Rock Climbing