Yash Gupta

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EDUCATION

University of Wisconsin, Madison

Madison, WI

Bachelor of Science in Computer Science and Data Science, GPA 3.74

Expected May 2026

• Relevant Courses: Advanced Data Structures & Object Oriented Programming, Distributed Systems, Machine Learning, Database Systems, Algorithms, Operating Systems, Data Visualization, Statistical Interference in R, Linear Algebra, Calculus

EXPERIENCE

Software Engineer Intern

May 2025 - Aug 2025

Samsara

San Francisco, CA

- Engineered an org-wide GraphQL media retrieval system in Go, powering \$2.3M+ ARR in new automation features by aggregating dashcam footage across 10,000+ devices; integrated Datadog and AWS CloudWatch for observability
- Built a React/TypeScript video library frontend with real-time filtering, pagination, and Mixpanel analytics; supported 20+ video metadata fields with performant GraphQL-backed queries
- Architected a concurrent video processing pipeline using goroutines and mutexes, enforcing per-org/device quotas and reducing database load via dual-read migration from PostgreSQL to DynamoDB

Software Engineer Intern

May 2024 - Aug 2024

Qualcomm

San Diego, CA

- Collaborated with cross-functional teams on dynamic slot reallocation for Snapdragon emulation machines using Agile methodologies, leveraging sprint planning and standups while managing epic on Atlassian JIRA
- Developed a parallel ETL pipeline processing 50GB+ of JSON log data from a network drive with multithreaded Python and SQLite3;
 implemented real-time analytics dashboards in AWS QuickSight
- Led research, implementation in Python, back-testing, and deployment into production of a Q-learning reinforcement learning model for dynamic slot reallocation, integrating a Prophet time series-based reward function, reducing wasted pending job delays by 28%

Product Intern

Jun 2023 – Oct 2023

The Level Company

New York City, NY

- Built sequential LLM models with GPT-4 and Langchain in Python and utilized advanced prompt engineering techniques to generate personalized sales messaging; leveraged Google Sheets API to record message iteration pipeline
- Automated advisor sourcing by integrating LinkedIn Sales Navigator with Python scripts to scrape and filter profile data, identifying over 200 new advisors, significantly reducing manual effort and improving efficiency
- Enhanced reengagement email campaigns using SendGridAPI and Python, resulting in increased engagement by 50%

PROJECTS

$\mathbf{enRollBadge} \mid \mathit{ReactJS}, \ \mathit{TailwindCSS}, \ \mathit{Python}, \ \mathit{DigitalOcean}, \ \mathit{Shell}, \ \mathit{SQLite3}, \ \mathit{Flask} \mid \underline{\mathbf{enrollbadge.com}}$

- Led a team of 4 to build a real-time enrollment notifier for UW-Madison students, solving high-demand class access issues; scaled to 1,100+ users and received institutional interest from multiple universities
- Designed intuitive, minimalistic frontend in ReactJS and TailwindCSS with async API calls, a dynamic search table, and a centralized subscriptions panel for seamless class management
- Engineered backend in Flask (Python) to poll internal university APIs via rotating proxies, parse JSON data, and trigger notifications; deployed on DigitalOcean with SQLite3, cron jobs, and Nginx for scalable, low-cost hosting

prpolish | Python, OpenAI API, GitPython, Click, GitHub CLI | PyPI

- Built an open-source, AI-powered CLI tool that auto-generates industry-grade GitHub PR titles and descriptions by analyzing git diffs, commits, and repository context using OpenAI GPT-3.5
- Implemented advanced prompting, auto-template detection, fallback flows, and interactive/fast modes with GitHub CLI and clipboard integration to streamline the developer workflow
- Released on PyPI with 4,000+ downloads, adopted by OSS maintainers and teams to improve PR hygiene and velocity across CI/CD pipelines

Sidekick | Python, Groq, OpenAI Whisper v3, LangGraph, Next.js, Anthropic Claude 4, WebSockets | Devpost

- Built the first Zoom-integrated meeting bot capable of real-time (sub-100ms) transcription and task execution using Groq API, Whisper v3, and WebSocket-based audio streaming for ultra-low latency
- Designed a LangGraph-based multi-agent orchestration system that parsed transcripts using Claude API and translated them into actionable tasks via tool-calling abstraction using Model Context Protocol (MCP)
- Developed a Next.js dashboard with live transcript previews and one-click task approvals, achieving sub-second E2E latency from voice to action

TECHNICAL SKILLS

Languages: Python, Go, Java, JavaScript, TypeScript, SQL, C, C++, R, Bash, Solidity, HTML5/CSS3, Assembly, LaTeX

Web/App Development: React.js, React Native, Next.js, Flask, TailwindCSS, Node.js, FastAPI, Django, Material UI, Chakra UI, Three.js, Radix UI, Zod, Chainlit, GraphQL, Express.js

Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, OpenAI, HuggingFace, LangChain, Claude, CrewAI, ChromaDB, LangGraph, Whisper, Prophet, Numpy, Pandas, Excel

Tools & Platforms: Git/GitHub, GitPython, GitHub CLI, JIRA, AWS (EC2, S3, Lambda, Quicksight, CloudWatch), Google Cloud, Firebase, Supabase, Docker, Kubernetes, PostgreSQL, SQLite, MongoDB, pgvector, APScheduler, Celery, Nginx, Mixpanel, Datadog, gRPC, Kafka, Cassandra, Spark, Hadoop, Postman, WebSockets, MCP, DigitalOcean