

# Yash Gupta

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## EDUCATION

### University of Wisconsin, Madison

Madison, WI

B.S. in Computer Sciences & Data Science, GPA 3.85

May 2026

- **Related Courses:** Object Oriented Programming, Advanced Data Structures, Data Management & Statistical Analysis in R, Introduction to Python, Introduction to Algorithm Theory, Relational Databases, Linear Algebra, Machine Organization and Programming, Advanced Data Analysis and Visualization with Python, Discrete Mathematics, Operating Systems, Distributed Systems

## EXPERIENCE

### Qualcomm

May 2024 - Aug 2024

Software Engineering Intern

San Diego, CA

- Optimized scheduling for Snapdragon chip emulation machines under the SVE team in the DragonX software division
- Engineered and deployed efficient, multithreaded Python scripts to analyze over **50 GB (~110,000 data points)** of scheduling log data and find critical inefficiencies, using Matplotlib and internal APIs
- Leveraged SQL and AWS QuickSight to reveal trends, collect data on past job data, and create visualizations for model
- Integrated and backtested a reinforcement learning model for dynamic slot reallocation, reducing wasted time on pending jobs by **28%**

### The Level Company

Jun 2023 - Oct 2023

Product Intern

Remote

- Spearheaded development of sequential large language models with GPT-4 using LangChain in Python for multi-stage process to generate effective and personalized messages to enable more connections with potential advisors, resulting in significantly higher response rates
- Collaborated with client services team to utilize LinkedIn Sales Navigator to automate finding advisors, sourcing **over 200 new advisors**
- Enhanced reengagement email campaigns using SendGridAPI and Python, leading to a **50% increase in re engagement rates**
- Automated profile scraping with LinkedIn APIs, utilizing Python algorithms to filter JSON and spreadsheets for relevant fields

### UC San Diego Division of Biomedical Informatics

Jun 2020 - Mar 2023

Intern

Madison, WI

- Worked on secure medical data transfer through Ethereum blockchain
- Directed development on user interface for medical data using Java and HTML5/CSS3
- Utilized Solidity and managed AWS virtual machines to work on the backend of the blockchain
- Implemented in **12 university hospitals** with high success rates
- **Co-authored a publication** in JAMIA; presented work at a National Institute of Health conference. [\[Link to publication\]](#)

## PROJECTS

### enRollBadge | ReactJS, Tailwind CSS, Python | [enrollbadge.com](#)

- Created unique software that allowed UW Madison students to receive real time notifications when class seats open
- Led a team of 4 developers to seamlessly integrate the API and scraping functionality to enable efficient data exchange between backend and frontend
- Managed frontend development and continuously maintained user interface in ReactJS and Tailwind CSS
- Implemented JSON parsing algorithms in Python to process data received from the backend API
- Developed a dynamic table using ReactJS to display and manage class information, with integrated search functionality
- Drove significant user growth with **1,000+ active users** through targeted marketing

### Zone In | ReactJS, Flask, Langchain | [Devpost](#)

- Built a web application that simplifies urban zoning via LLMs and advanced image generation for visualization
- Spearheaded development on chatbot implemented with Langchain that answers zoning queries based on information stored and processed through HuggingFace embeddings and ChromaDB vector stores
- Designed an image model with DALL-E, enabling users to visualize property changes, with preprocessing using LangChain and custom context systems
- Contributed to frontend development with React JS, Three.js, and Material UI, and backend integration using Flask and Postman
- Utilized Google Maps API, Python, and PyPDF to process zoning codes and integrate multimodal data for enhanced user experience and decision-making
- Recognized as a **top 10 project** at Northwestern University's WildHacks 2024

### trckr | Python, SQL, CrewAI, OpenAI, APScheduler | [Demo](#)

- Developed a full-stack web application for automating job application tracking via Gmail and Outlook integration
- Engineered a multi-agent LLM system utilizing CrewAI and OpenAI, which processes thousands of emails to extract structured JSON outputs
- Created custom algorithms for efficient data handling, providing real-time updates on job application statuses
- Designed and maintained a scalable SQL database, ensuring reliable storage and efficient management of extracted data
- Integrated asynchronous task management with APScheduler to optimize email processing and minimize server load
- Crafted a minimalistic UI, focusing on enhancing user experience
- Showcased at Buildspace IRL 2024, garnering **over 50 users on the waitlist**

## SKILLS

**Programming Languages:** Java, Python, C, HTML/CSS, Git, Bash, R, SQL

**Web Development:** HTML5, CSS3, JavaScript, NodeJS, ReactJS, NextJS, TailwindCSS, Flask, A/B Testing

**Frameworks:** Tensorflow, PyTorch, ScikitLearn, Pandas, AWS (EC2), SQLite, Selenium, Docker, Spark, Kafka