Vibhrav Jha

✉ vibhrav@gmail.com in linkedin ⚙ github.com/v1r4v 🔗 portfolio

EDUCATION

University of Wisconsin Madison   September 2023 - May 2027
B.S. Computer Science, Economics and Data Science   *Current GPA: 3.72/4.0*
- **Courses:** Artificial intelligence, Machine Learning for Research, Deep learning, Object-Oriented Programming, Data Structures & Algorithms, Embedded Systems, Discrete Math, Linear Algebra, Calculus, Economics, & Statistics
- **Clubs & Awards:** Dean's List (2x),Strato VC, Google Dev club, Economics Student Association, IM Soccer Championship & Soccer Captain, APAC-Soccer Champions

SKILLS

Languages: Java, JavaScript, Python, HTML/CSS, SQL

Frameworks/Tools: React, Next.js, Spring Boot, Pandas, NumPy, scikit-learn, Matplotlib, PyTorch, REST API, JUnit, Git+GitHub, Google Cloud Platform, VS Code, JetBrain IDE's

AI/ML: PyTorch, Llama, LangChain, HuggingFace, ChromaDB, FAISS, Pandas, NumPy

EXPERIENCE

VDart Inc. | *Software Engineering Intern*   May 2025 – Aug 2025
- **Architected production-grade RAG system** using **Python**, **LLama3**, **ChromaDB** and with custom embedding models, automating RFI/RFP generation and **reducing manual drafting by 80%** while accelerating proposal turnaround from 2+ weeks to under 24 hours.
- **Engineered end-to-end ML pipeline** with advanced semantic chunking, multi-modal document parsing (**OCR + NLP**), and dynamic prompt templating across **100+ technical documents**, achieving **96% accuracy** in contextual response generation
- **Streamlined data operations** by cleaning and processing **10,000+ client records** through automated form capture workflows, seamlessly migrating data to **HubSpot CRM** and developing interactive **Power BI dashboards** that provided real-time business intelligence, improving sales forecasting accuracy by **35%**.

Recreation and Wellbeing | *Supervisor*   Sep. 2023 – Present
- Coordinated and automated scheduling, staffing, and logistics for **50+** athletic programs and competitive events involving over **800 participants**. Leveraged advanced management software to streamline operations, resulting in a **15% increase** of new participants.
- Led a team of **10-15 staff members**, implementing process improvements and using data-driven decision-making to ensure smooth execution of programs.

Pink city Expressways | *Software Development Intern*   Jan 2022 – Mar 2023
- Designed and implemented a CRM system using **Python** and **SQL** to track **30+** business leads, increasing successful partnerships from **15 to 19 (+26.67%)** within **8 months**.
- Developed an automated contractor management tool in **Python** that optimized machinery utilization and generated an additional **$18,000** in revenue through improved resource allocation.

PROJECTS

Startup Scout | *Typescript, React, Express.js, SQLite, Cors, Python, Shadcn, Firecrawl*   March 2025
- Built a seamless investor-startup matching system with smart filtering, leveraging Crunchbase and Datarade datasets with over 1,000+ company profiles, and developed a backend using Express.js, CORS, and SQLite to enable efficient data retrieval and frontend integration.
- Scraped and parsed startup data for 1,000+ startups using Firecrawl and a custom built Python CSV parser, storing structured data in SQLite for efficient querying.
- Designed an interactive dashboard with React (Recharts) to visualize startup valuations and funding trends through dynamic graphs and charts.

Facial Analysis System | *Python, NumPy, SciPy, PCA, Computer Vision*   February 2025
- Implemented a Principal Component Analysis (PCA) system for facial image processing using the Celebrity dataset on kaggle, focusing on dimensionality reduction and feature extraction of 1000 celebrity images.
- Developed modules for image reconstruction, eigenface visualization, and noise perturbation analysis using NumPy and SciPy, achieving efficient representation of 3000-dimensional facial features.