Kanav Bengani

kanavbengani@gmail.com | www.kanavbengani.com | Boston, MA

EDUCATION

Northeastern University, Boston, Massachusetts **3.95**/4.0
B.S. Major in **Data Science**, Minor in **Mathematics** May 2025
Coursework: Algorithms, Object-Oriented Design, LLM-Engineered Systems, NLP, Machine Learning, Large-scale Storage/Retrieval
Artificial Intelligence, Database Design, Information Visualization, Discrete Structures, Linear Algebra, Statistics

SKILLS

Programming Languages: Python, Java, SQL, C/C++, JavaScript, HTML, CSS
Frameworks: React, Flutter, Django, Flask, Tailwind, NumPy, Pandas, Scikit-learn, Matplotlib, PyTorch
Tools: AWS, Kubernetes, Docker, Jenkins, ZooKeeper, Git, MongoDB, ClickHouse, Redis, Kafka, PostgreSQL, Grafana

WORK EXPERIENCE

HubSpot | *Software Engineer* December 2025 – Present
- Built **agentic search** to enhance discovery and conversion of Marketplace integrations using **MCP tools** and skills
- Devised a platform with **80k+** users/week with **Java** + React allowing marketing to customize Marketplace content

Capital One | *Software Engineering Intern* June 2025 – August 2025
- Created a web app using **Flask** APIs and a React frontend that extracts image data with **85%** accuracy using **OCR**
- Assessed image quality for over **100,000** documents/day (i.e. government-issued IDs, W-2s, and bank statements)

Klaviyo | *Software Engineering Co-op* January 2025 – May 2025
- Optimized nightly segmentation jobs to be **7x** faster by ingesting **91%** less duplicate records per second
- Utilized **Django** (backend), **ClickHouse** (sharded database), and **Kafka** (event streams) to process customer queries
- Distributed deployment across **192 Kubernetes** pods and managed cluster configurations using **ZooKeeper**

Fidelity Investments | *Software Engineering* Intern June 2024 – August 2024
- Automated the archival of approximately **500** internal associate compliance alerts per day for auditing purposes
- Used **Azure Functions** to create APIs that retrieve alert data, package into a pdf, and send to document storage

Johnson & Johnson | *Machine Learning Co-op* January 2024 – May 2024
- Developed **71%** accurate **scikit-learn** models in **Python** to help reps identify patients unlikely to receive therapy
- Compared clustering (k-means/hierarchical), random forest, and decision tree as possible solutions

PROJECTS

Ballboy: Fantasy Tennis | **React Native** + **Django** Mobile App May 2026 – Present
- Founded a platform launched on **iOS** where a growing user base joins fantasy leagues following live tennis matches
- Lead engineering to ensure a **low-latency, real-time** app using tools like **Redis**, Cloudflare, Supabase, and Render

Reddit Sentiment Analysis | **Python** Agentic Application November 2024
- Fine-tuned an **LLM** that given a college-related query, constructs sentiment from the respective subreddit
- Parsed and filtered context using **RAG** and a **BERT** classifier; derived sentiment using the Meta **Llama 3.1B** model

Reversi | **Java** Video Game November 2023
- Architected a 2 player (human or AI w/minimax algorithm) Go-like board game using **OOP** and **MVC** architecture

RESEARCH EXPERIENCE

FactEvo Optimization March 2024 – June 2024
- Utilized natural-based **evolutionary computing** to solve a university course scheduling optimization problem
- Ran a **100,000** generations for natural selection to result in a pareto-optimal, i.e. non-dominated set of solutions

Shriners Children's Hospital Biomed AI September 2020 – May 2022
- Improved surgical outcomes for cerebral palsy patients by developing an index with a predictive **autoencoder** model
- Submitted a **publication** in the Journal of Biomechanics and a poster in GCMAS + ORS conferences

LEADERSHIP

President | Computer Science Organization (CSO)
- Directed the CSO board in organizing weekly meetings, social events, and financing for hackathons (**45+** teams)