Mike Hanson

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EDUCATION

Virginia Polytechnic Institute and State University

Aug. 2021 – May 2025

B.S. Computer Science | GPA: 3.52/4.0

Blacksburg, VA

- Courses: Data Structures, Computer Organization, Computer Systems, Cloud Software, Algorithms & Analysis
- Honors: Cum Laude, Dean's List: Spring 2022 Spring 2025

TECHNICAL SKILLS

Languages & Frameworks: Java, Python, C, C++, Node.js, React, FastAPI, Flask, Tailwind, OpenAI API

Development & Deployment: Docker, Git, AWS, Heroku Database Tools: MongoDB, Supabase, PostgresSQL, Redis

Projects

AI Poker Game | Demo URL

Spring 2025

- Developed a full-stack poker application using FastAPI, React, and OpenAI API that simulates realistic poker gameplay with AI opponents featuring distinct personalities and verbal commentary to enhance psychological reading skills
- Implemented No-Limit Texas Hold'em gameplay supporting up to 5 AI opponents from 10 unique personalities, with customizable opponent selection and hidden identity options for strategic variety and enhanced challenge
- Built comprehensive analytics system tracking player performance metrics and game statistics, enabling users to analyze their gameplay patterns and refine strategies through detailed post-game insights

Fantasy Football App | Demo URL

Fall 2024

- Architected and deployed a full-stack fantasy football application using the FARM stack (FastAPI, React, MongoDB), featuring real-time NFL data collection through Celery workers and live draft functionality with WebSocket integration
- Implemented a scalable backend system supporting flexible league management (2-20 players) with automated data scraping, roster management, and real-time scoring updates for multiple concurrent leagues
- Designed a responsive React frontend with Tailwind CSS, incorporating live player statistics, matchup tracking, and waiver wire management, while ensuring seamless real-time updates across all user interfaces

Bullpen Budgets | Demo URL

Spring 2024

- Developed a web-based MLB analytics platform that tracks real-time bullpen statistics and pitcher workload data across all 30 teams; features automated daily updates and comprehensive performance metrics.
- Created a scalable data collection system using Python and BeautifulSoup4 for web scraping, deployed via AWS Lambda and S3; delivered customizable dashboards for users to track favorite teams with comparative analysis and usage patterns

SPX Radar | Demo URL

Fall 2023

- Built a Flask-based S&P stock analysis platform featuring real-time market data integration through yfinance API; delivers dynamic stock grades and 5-hour trend projections updated every 15 minutes
- Implemented an intelligent scoring system that processes live market data to identify high-risk opportunities and actionable insights, while maintaining persistent data storage and reliable trend analysis

Work Experience

Fulfillment Center Associate

May 2024 – Aug. 2024

Amazon

East Fishkill, NY

- Processed 5,000+ items daily while maintaining high accuracy and meeting time requirements
- Identified workflow bottlenecks and collaborated with team members to optimize distribution processes

Range Attendant

May. 2023 – August. 2023

Par Fore Golf Center

East Fishkill, NY

- Orchestrated operations and inventory management for a high-traffic golf facility
- Provided expert equipment consultation and technical recommendations to diverse clientele