Himil Patel

Himil.Patel@yahoo.com | (647) 449-6846 | Toronto, ON | himilpatel.com/linkedin

EDUCATION

York University **December 2026**
Bachelor's in Computer Science *Toronto, ON*

- Notable Classes: Big Data, Data Mining, Artificial Intelligence, Data Structures, Algorithms, Database, Operating System, Software Tools, Web Technologies.

SKILLS & INTERESTS

- **Technologies:** Java, JavaScript (ES6+), HTML5, CSS3, JSON, Bootstrap, Python, C, Flask, Linux, Azure, REST APIs, Machine Learning (TensorFlow, scikit-learn, LSTM), Data Analytics
- **Skills:** Strategic Planning; Team Collaboration & Leadership; Adaptability & Quick Learning; Time Management & Organization, Rapid Prototyping
- Tools & Platforms: Git/Bitbucket, Jenkins (CI/CD concepts), Nginx, DevOps workflows, Content Management Systems (familiar with AEM, CMS architecture)
- **Interests:** Camping; Traveling; Fitness; Stock Market Investing; Cryptocurrency

PROJECTS

AI-Powered Stock Forecasting & Market Insight Platform **April 2025**
ML Engineer | Python, Flask, LSTM, TensorFlow, scikit-learn, yFinance, Polygon.io, Bootstrap, HTML/CSS, NewsAPI

- Developed and deployed an LSTM-based model that predicts next-day stock closing prices using 10 years of historical OHLCV data and rolling 90-day input windows
- Integrated real-time data feeds (Polygon.io) and automated visualization for the top 10 most active stocks with live price/volume updates
- Built a full **back testing engine** with portfolio simulation, trade logging, and performance metrics (MSE, ROI), visualized with dynamic charts
- Enriched insights with **financial fundamentals** (EPS, earnings date, revenue) and live **news headlines** for interpretability and user trust

Quantitative Portfolio Optimization Platform **January 2025**
Full-Stack Quant Engineer | Python, Pandas, NumPy, FastAPI, CVXPY, Scikit-learn, ReportLab, Backtesting

- Built a full-stack quant finance app (FastAPI + React + Tailwind) implementing portfolio optimization models: Mean–Variance, Robust MV, Risk Parity, and Black–Litterman.
- Engineered risk analytics and backtesting modules, including VaR/CVaR estimation, equity curve simulation with transaction costs, and PDF/CSV exportable performance reports.
- Enhanced user experience with intuitive UI/UX, onboarding tutorials, tooltips, presets, and interactive visualizations for portfolio weights, metrics, and historical performance.

AI Resume Matcher & Interview Coach **April, 2024**
Full-Stack Developer | React (Vite), Tailwind, Framer Motion • FastAPI, Python • sentence-transformers, FAISS • PDF/DOCX parsing • Docker, CI/CD (GitHub Actions) • OpenAI

- Built a full-stack AI Resume Matcher (React/Tailwind/Framer-Motion + FastAPI) that parses PDF/DOCX/TXT, uses sentence-transformers (MiniLM) + FAISS to score JD–resume similarity, surface ATS keyword gaps, and highlight top matching snippets; P95 latency < 0.8s, cutting tailoring time from ~30 min to <10s.
- Added a mock-interview coach with JD-aware questions and STAR/metric feedback; saves answers for personalization.
- Designed a modular NLP pipeline (chunking, vectorization, similarity search) that reduced analysis latency from ~2.3s → <800ms P95 via caching and normalized vectors