

Nirav Polara

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SKILLS

- **Programming Languages :** Python, Java, SQL, NoSQL
- **Generative AI & LLMs:** LLM Integration, Fine-Tuning (LoRA/QLoRA), RAG, Prompt Optimization, LlamaIndex, Vector Embeddings & Semantic Search
- **ML/DL:** PyTorch, TensorFlow, Keras, Hugging Face Transformers, Weights & Biases, DistilBERT, BART, T5,
- **Agentic AI & Orchestration:** LangGraph, CrewAI, AutoGen, Semantic Kernel, State-Tracking, Agentic Workflows, n8n
- **Data Storage :** PostgreSQL, MySQL, MongoDB, Oracle, Redis
- **Cloud & Infrastructure:** AWS, GCP, Docker, Kubernetes, Terraform, FastAPI
- **MLOps & Observability:** CI/CD Pipelines, Git, Prometheus, Grafana, OpenTelemetry, Model Versioning, Automated Retraining

PROJECTS

TradingPro | Python, PyTorch, FinBERT, Transformers, XGBoost, TA-Lib, RAG, Docker, React, Flask, PostgreSQL, Celery

- Orchestrated LangGraph multi-agent workflows to automate strategy synthesis, improving signal precision from 55% to 65%.
- Developed Temporal Fusion Transformers for time-series forecasting, achieving 60% directional accuracy over LSTM baselines
- Engineered a RAG-based pipeline using Pinecone to ingest 50k+ news sources, reducing research latency by 70%.
- Built an end-to-end MLOps pipeline with Celery for real-time inference, maintaining sub-5s latency for production signals.
- Implemented Monte Carlo simulations and Kelly Criterion for position sizing, reducing portfolio drawdown by 40%

FraudGuard | Java, Python, Kafka, Flink, XGBoost, PyTorch, FastAPI, Redis, Docker, Kubernetes, Azure, Prometheus/Grafana

- Engineered real-time fraud platform using Flink and XGBoost, handling 50k+ TPS with sub-second latency
- Designed hybrid detection layer combining Graph Neural Networks and rules for precise risk scoring.
- Established CI/CD pipelines with Azure DevOps to automate secure model deployment and testing.
- Unified streaming and batch data architectures by migrating legacy systems to Azure Synapse
- Reduced financial risk by 18% through composite scoring logic and explainable AI frameworks.

EXPERIENCE

Freelance AI Engineer (Toronto, ontario)

Apr 2024 - Present

- Designed and deployed domain-specific LLM and RAG systems to support business operations.
- Fine-tuned transformer models (DistilBERT, BART, T5) achieving 95%+ accuracy on domain-specific NLP and retrieval tasks.
- Established MLOps practices using MLflow for experiment tracking, model versioning, and controlled production releases.
- Delivered production AI services on cloud infrastructure using AWS, FastAPI, and Docker.
- Developed agentic AI applications using emerging agent frameworks to support reasoning and stateful interactions.

Techy Panther

Ahmedabad, India

Software Developer

Sep 2021 – Sep 2023

- Designed secure REST APIs with MongoDB, Node.js, and Python for production-grade application systems.
- Customized Open edX LMS applications and deployed on Google Play Store and Apple App Store.
- Deployed AWS and Firebase infrastructure supporting high availability and production-grade reliability across platforms.
- Developed dashboards, admin panels, and workflow modules improving application performance and user experience.
- Collaborated through complete SDLC ensuring timely delivery of stable, maintainable software solutions.

Webunity InfoTech

Surat, India

Software Developer

Apr 2019 – Feb 2021

- Developed Shopify and WordPress storefronts managing setup, customization, and client deployment strategies.
- Built responsive websites and web applications integrating frontend and backend components for client requirements.
- Designed and implemented responsive UI/UX interfaces using HTML, CSS, and JavaScript for optimal user experiences.
- Managed ongoing website maintenance, updates, and client support ensuring continuous stability and security.
- Conducted website testing, performance optimization, and quality assurance ensuring stable production deployments.

EDUCATION

Master in Electrical and Computer Engineering | **University of Windsor**

Jan 2024 – Apr 2025

Bachelor of Engineering in Computer Engineering | **Gujarat Technological University**

Aug 2015 – Sep 2019