

Gaurav Mudbhatkal

gmudbhat@gmail.com | [GitHub](#) | [Linkedin](#) | [Website](#)

TECHNICAL SKILLS

Languages and Tools: Python, SQL, Cypher, Git, Docker, Kubernetes, ArgoCD

Data Science and ML: PyTorch, Scikit-Learn, TensorFlow, OpenAI, LangChain, Metaflow, MLFlow, Airflow

Big Data and Cloud: PostgreSQL, Neo4j, Elastic, AWS, Spark, Azure

Project Management: JIRA, Trello, Confluence, Notion, ServiceNow

EXPERIENCE

Data Scientist

June 2022 – Present

Limbik

Kitchener, ON

- Optimized experiment tracking and reproducibility in a shared environment, orchestrating model training, evaluation and monitoring workloads by leveraging Metaflow with Kubernetes
- Engineered MLOps pipeline to productionize fine-tuned LLMs, leveraging FastAPI to create REST endpoints
- Architected a scalable, hierarchical database in PostgreSQL to increase data retrieval efficiency by 30%, handling ingestion of 200K+ monthly survey responses
- Led machine learning service deployment processes using GitHub Actions, ArgoCD, and Kubernetes
- Halved analyst workload by developing CLI-based tool to pull artifact-related data from PeakMetrics
- Developed a proof-of-concept to generate survey data using AI agent-based workflows with CrewAI synthetically
- Built internal data science tool enabling natural language querying, embedding projection, and rapid prototyping

Machine Learning Intern

Sep 2021 – Dec 2021

Thomson Reuters - Legal Tracker

Toronto, ON

- Tuned and evaluated document classification models in AzureML after conducting surveys across departments
- Implemented model deployment pipelines, integrating machine learning services with Azure DevOps

Data Engineer Co-op

Jan 2021 – Apr 2021

Manulife - Canada Data Office

Waterloo, ON

- Streamlined ETL workflows in Azure Data Lake with Spark, enhancing data warehousing capabilities
- Coordinated the migration of 30 repositories to GitHub with ServiceNow, JIRA, and Confluence

Data Engineer Co-op

Jul 2020 – Aug 2020

KPMG - Lighthouse

Waterloo, ON

- Calculated upwards of \$2,000,000 in eligible subsidies by wrangling client payroll data using workflows in Alteryx
- Reduced manual reporting time by 70% by automating report creation using VBA in MS Excel

Data Scientist Co-op

Sep 2019 – Dec 2019

RBC - Anti-Money Laundering

Toronto, ON

- Engineered NLP pipeline for 10,000+ documents with Doc2Vec embeddings, entity recognition, and topic modeling
- Achieved 96% accuracy and 82% precision through a neural network-based multi-label text classifier with Keras

PROJECTS

Energy Swap AI | *FastAPI, Solana, React, Python*

Jan 2025

- Developed a decentralized application for energy trading, utilizing Solana for peer-to-peer transactions
- Implemented AI Agents to monitor, predict, and optimize energy usage, before providing personalized insights
- Built a scalable backend with FastAPI to support dynamic energy trading and AI-driven recommendations

BESST (Battery Energy Storage System Toolkit) | *Flask, Gurobi, Plotly, Heroku*

Apr 2022

- Web-based decision support system to optimize residential power usage, leveraging Battery Energy Storage
- Developed a mathematical optimization model using Gurobi to minimize energy costs and GHG emissions
- Visualized cost savings and reduction in carbon footprint based on user inputs dynamically with Plotly

EDUCATION

University of Waterloo

Aug. 2017 – April 2022

Honors, Bachelor of Applied Sciences in Management Engineering, Computing Option

Waterloo, ON