

# Devanshu Khurma

(437) 435-1479 | [devanshu.khurma@gmail.com](mailto:devanshu.khurma@gmail.com) | [github.com/devanshuk97](https://github.com/devanshuk97)

## EXPERIENCE

---

### Applied Machine Learning Scientist II

February 2025 – Present

*Toronto Dominion Bank Group*

*Toronto, ON*

- Architected and deployed Agentic AI solutions on Azure Databricks for mortgage underwriting. Integrated Vision Language Models and advanced prompting to automate complex document processing, reducing turnaround time from 15 hours to 15 minutes and delivering **CA\$15MM in annual cost savings**.
- Drove enterprise innovation by conceptualizing and filing **4 patents within 12 months**.
- Fine-tuned a RAG knowledge management system for customer-facing teams via Hugging Face PEFT (LoRA) and custom instruction-response datasets, optimizing context synthesis while minimizing computational costs.
- Spearheaded organizational AI enablement and mentored junior engineers by leading bi-weekly technical workshops and GitHub Copilot Bootcamps, accelerating the enterprise-wide adoption of modern machine learning capabilities.

### Data Scientist II

September 2022 – February 2025

*Toronto Dominion Bank Group*

*Toronto, ON*

- Architected a deep learning based anomaly detection engine to mitigate behavioral risks, championing Responsible AI to boost precision by 115%, recall by 23%, and generate **CA\$13.5MM in FY26 value**.
- Designed scalable, end-to-end AI workflows, serving as the primary technical SME to translate complex business requirements for operations teams.
- Led cross-functional data governance initiatives and resolved critical post-cloud migration discrepancies, ensuring strict compliance and seamless continuity for enterprise data ecosystems.

### Machine Learning Engineer

August 2021 – September 2022

*Laps*

*Montreal, QC*

- Optimized compute infrastructure using GCP BigQuery and AWS SageMaker, accelerating pipeline runtime by **200x** and delivering **CA\$18,000/year** in cost savings by refining solution architecture.
- Cut support agent workload by **28%** by applying advanced analytics to engineer a real-time intent detection chatbot powered by word embeddings unlocking **CA\$33K** in efficiency gains.
- Consulted on and deployed a highly scalable recommender API utilizing AWS Personalize and modern DevOps practices, ensuring seamless integration and delivery within strict Agile timelines.
- Authored comprehensive technical pitch decks to support capital-raising efforts, effectively translating complex machine learning architectures into compelling value propositions for executive stakeholders and investors.

### Data Scientist - Go-to-Market Operations

July 2020 – August 2021

*Brother International Corporation*

*Montreal, QC*

- Cut operational costs by **CA\$25,000/year** and **reclaimed 200+ hours annually** by optimizing complex ETL pipelines and refactoring them in Scala.
- Delivered **15 % Forecast Value Added** over legacy baselines by designing a custom time-series model, achieving **87% total accuracy** (MAPE) incorporating complex logistics data into actionable sales strategies.

## EDUCATION

---

### University of Texas

Austin, USA

*Master of Science in Computer Science (4.0 GPA)*

*2024 – 2026*

### McGill University

Montreal, Canada

*Master of Management in Analytics (3.9 GPA, Dean's list)*

*2019 – 2020*

### Delhi Technological University

New Delhi, India

*Bachelor of Engineering, Computer Science (86.2%)*

*2015 – 2019*

## TECHNICAL SKILLS

---

**AI, ML & GenAI:** PyTorch, TensorFlow, Scikit-learn, Hugging Face, LangChain, LangGraph, RAG, LLMOps

**Cloud, Data & DevOps:** AWS, Azure, GCP, Databricks, Spark, Snowflake, Kafka, Docker, Airflow, CI/CD

**Languages & Analytics:** Python, SQL, R, Scala, Pandas, Tableau, Power BI

**Certifications:** AWS Solutions Architect Associate, Databricks Data Engineer, Vector Institute Agentic AI 2.0

## INTERESTS

---

Endurance Running, Tennis, Digital Photography, Chess