




Dhruv Sharma

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EDUCATION

University of Waterloo | *BASc. in Management Engineering, Minor in Artificial Intelligence* **Sep 2021 – Apr 2026**

- **GPA:** 3.98/4.0, First in Class Engineering Scholarship (2023, 2024), Drysdale International Scholarship
- **Courses:** Data Structures & Algorithms (Java), ML/AI (Python), Optimization (Linear/Non-Linear Programming)
- **Certifications:** Microsoft Azure Certified – AI Fundamentals, Azure Fundamentals, Data Fundamentals

EXPERIENCE

Software Engineering Intern **Sep 2025 – Present**
Augment **San Francisco, CA**

- Building microservices for an Agentic AI logistic workflow by developing API endpoints and integrations with AWS

Machine Learning Engineer Intern **Jan 2025 – May 2025**
Safari AI **New York, NY**

- Deployed scalable data-sampling on AWS Sagemaker, reducing camera sampling time by 90% through parallelization
- Containerized sampling and training jobs with Docker, using S3 for inputs and ECR for images, cutting costs by 25%
- Fine-tuned 11 Faster R-CNN models on 2,000+ images, improving people and vehicle detection mAP by 10%
- Reduced inference latency by 23% by automating ONNX-to-TensorRT conversion with trtexec and optimization flags
- Built 45+ custom Apache Flink and Pulsar streaming topologies to transform edge camera detections into JSON data
- Integrated AWS Lambda with Slack API, using CloudWatch triggers to send sampling metadata on job completion

Software Engineering Intern **May 2024 – Aug 2024**
OnOrder - Stealth Startup **Toronto, ON**

- Ingested 300,000+ household products via a Node.js + Puppeteer scraper, reducing manual data entry time by 70%
- Built a CSV Importer using Next.js, TypeScript, and GraphQL, automating data ingestion for 40+ product lines
- Deployed a Flask backend on Railway using Docker, reducing API response times by 40% for similarity search operations
- Utilized OpenAI LLM Agents to automate product creation from URLs, expanding the product catalog by 15%
- Implemented a RAG-based recommendation model with Langchain and Pinecone, embedding 300,000+ product vectors for high-precision similarity searches, leveraging Max-Marginal Relevance ranking (MMR) for optimal results

Software Engineering Intern **Sep 2023 – Dec 2023**
TD Bank **Toronto, ON**

- Created a full-stack interface performing CRUD operations utilizing a .Net Framework with C#, WPF, and MS SQL
- Optimized file archiving processes by modifying Python and Shell scripts reducing system memory usage by 2 GB
- Utilized Test-Driven Development (TDD) methodology to deliver 8+ features and created 60+ unit tests in C#
- Migrated a Jenkins Server with 20+ jobs to a development server, reducing build times from 60 minutes to 36 minutes

Software Engineering Intern **May 2022 – Aug 2022**
Loblaws Inc. **Toronto, ON**

- Resolved 140+ critical incident tickets for microservices on a pharmacy app using Shell Scripts and SQL queries
- Implemented Excel macros to compare datasets with 50k records, leading to a 40% reduction in data validation time

PROJECTS

Wat.AI – Fortif.AI | *Python, PyTorch, OpenCV, Flask, YOLO, Docker, Kafka* **Feb 2025 - Present**

- Developing an AI-powered assistant that performs real-time hazard detection, enabling seniors to receive safety alerts
- Engineering a MLOps pipeline for deploying YOLO models, utilizing Docker for containerization and Kafka for streaming

Profected | *Python, Flask, React.js, Node.js, MySQL, Material UI* **May 2024**

- Built a platform with K-Nearest Neighbours to match 1,000+ users, improving mentorship connections by 35%.
- Designed a React.js and MUI frontend, boosting user engagement by 25% with a responsive interface.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, TypeScript, SQL, GraphQL, Java, C#, HTML, CSS
- **Frameworks/Libraries:** Node.js, React.js, Next.js, Express, TailwindCSS, Flask, NumPy, OpenCV
- **Developer Tools:** AWS, Azure, Docker, Kubernetes, Git, Linux, CI/CD (Jenkins), MySQL, PostgreSQL