# NATHAN SKIBICKI

#### Toronto, Ontario

# Experience

# Data Analyst

January 2025 - May 2025

Mississauga, Ontario

Mitsubishi Heavy Industries

- Engineered optimized data processing pipeline with **pandas**, **numpy**, **openpyxl**, and **tqdm** for real-time compilation analysis, achieving **98%** runtime reduction and significantly enhancing operational throughput.
- Developed aircraft maintenance prediction system using **PyTorch** with multi-variable linear regression (aircraft age, flight cycles, flight hours), reducing unnecessary maintenance costs by \$2,000+ per check while flagging critical aging components.
- Constructed automated data pipelines with Python, Flask, and SQL that decreased processing time by 63% and delivered real-time prediction dashboards to maintenance teams.

# Full Stack Developer

May 2024 – December 2024

 $Mitsubishi\ Heavy\ Industries$ 

Mississauga, Ontario

- Architected high-performance airline dashboard application using **React.js**, **Redux** and **Flask** with **Azure Data Studio** integration, successfully sold to two airline operators generating \$27,000 in annual subscription revenue.
- Optimized existing **Power BI** application infrastructure, resulting in **80%** resource cost reduction through enhanced architecture and query optimization.
- Built optimized Flask API endpoints with custom SQL views for data retrieval, reducing dashboard load times from 6 minutes to 2 seconds and enabling seamless real-time user interactions.
- Generated an automated script to systematically reorganize and structure historical airline data, streamlining data management processes.

## Programming Instructor

June 2023 - August 2023

Ultimate Coders

Markham, Ontario

- Mentored multiple students in **Arduino**, **Python**, and **Javascript**.
- Adapted teaching strategies and resources according to student progress.
- Offered constructive feedback and personalized assistance to empower students in attaining their learning objectives.

#### Projects

HealthMate (Hack Western) React.js, TensorFlow, Next.js, Tailwind CSS

November 2023

 Built a digital health assistant using TensorFlow for real-time posture tracking and Next.js frontend with Infobip API integration for productivity-enhancing notifications.

#### Inventory Management Service Python, Redis, gRPC

October 2023

• Engineered a thread-safe inventory management system using **Python** with **gRPC** for client-server communication and **Redis** for efficient data storage and retrieval.

## University Map Application () Java, Swing, JSON, MVC Architecture

April 2025

Developed an interactive campus navigation system with dynamic POI management, custom filtering, and admin
functionalities that enables users to efficiently locate and bookmark campus resources.

#### R swap React.js, OpenAI API, Tailwind CSS, Firebase

Oct 2023

• Developed Resume Swap, an AI-powered resume tailoring application that analyzes job descriptions and generates tailored LaTeX resumes, increasing job response rates by 50%.

## Education

## Western University

September 2021 - May 2026

Bachelor of Science, Computer Science Specialization

London, Ontario

#### Technical Skills

Languages: Python, Java, C, C++, C#, HTML/CSS, JavaScript, R, SQL

**Developer Tools**: Confluence, Jira, Amazon Web Services, Netbeans, Adobe Experience Manager, Sourcetree, Git, Linux, Unix, Github, MS Azure, PowerBI, Azure SQL

Frameworks and Libraries: React.js, Redux, MongoDB, Express.js, Axios, NumPy, Matplotlib, Pandas, spaCy, Node.js, Scikit-learn, Tailwindcss, Tensorflow, Infobip API, Flask, PyTorch, openpyxl, tqdm

Testing: Postman, JUnit