Avi Walia

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EDUCATION

University of Toronto

Sep 2022 – Apr 2026

Bachelor of Computer Science, Specialist in Data Science

Toronto, ON

<u>Relevant Courses:</u> Data Science, Statistical Methods for Machine Learning, Neural Networks and Deep Learning, Software Engineering, Databases, Data Visualization, Data Analysis, Algorithms

TECHNICAL SKILLS

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

Libraries/Frameworks: Pandas, NumPy, Scikit-Learn, PyTorch, Matplotlib, React.js, Flask, JUnit

Developer Tools: AWS, Git, PowerBI, Jupyter, Google Colab, Maven, Jaspersoft

Databases: Oracle, Google Firestore, PostgreSQL, MongoDB

Skills: Data Science, Software Engineering, ETL, Cloud Computing, Web Development

EXPERIENCE

Software Development Engineer

May - Aug 2025

Amazon - Customer Service Operating System (CSOS) Team

Toronto, ON

- Reduced a 60-hour build cycle to under 1 hour by owning end-to-end development of an automation tool, significantly accelerating deployment of secure device images for Customer Service Agents.
- Designed and implemented the solution using AWS services including Lambda, S3, DynamoDB, ECS, EC2, and SQS, ensuring scalability, reliability, and maintainability.
- Collaborated with cross-functional engineering teams to harden the CSOS environment and mitigate vulnerabilities in customer data workflows.
- Conducted validation and regression testing on new OS builds to verify system integrity, performance, and compliance with Amazon security standards.

Full Stack Developer

May - Aug 2023 and May - Aug 2024

Third Eye Solutions Inc.

Mississauga, ON

- Facilitated and carried out application upgrade from Java 8 to 17, ensuring compatibility, leveraging new features, and improving application performance and security
- Used Oracle SQL Developer to write queries to maintain Customer Schemas and update Data Models
- Created e-signature application to automate and store customer acceptance of insurance contracts

Projects

 $\textbf{Toronto Subway Delay Analysis} \mid \textit{R, Regression, GAM, Random Forest, XGBoost, Data Visualization}$

- Conducted an end-to-end analysis of 6,500+ TTC subway delay records from Toronto Open Data and integrated weather data via Open-Meteo API
- Engineered a cleaned dataset by filtering erroneous/multi-station records, merging delay code dictionaries, and aligning weather metrics to timestamps
- Developed predictive models to forecast delay durations

Twitter Trending Topics Data Analysis | Python, pandas, NumPy, scikit-learn

- Conducted trend analysis on recent tweets mentioning "Toronto" using Latent Dirichlet Allocation
- Utilized Python libraries such as Tweepy and NLTK to extract, clean, and preprocess social media data

Extra-Curriculars

- Vertige Investment Group Project Lead of Algorithmic Trading
- Statistics and Data Science Peer Mentor University of Toronto
- Athletics Intramural Sports Teams Basketball and Volleyball