

#### ASPIRING DATA SCIENTIST

Downtown, Toronto ON, Canada

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Skills\_

**Languages** Python, SQL, Java, Scala, HTML, CSS

**Big Data Frameworks** Spark, Kafka, Hadoop, NiFi

**Development Tools** Azure, Databricks, Docker, Linux, Git, JMeter — PyCharm, VSCode, Data Studio, Vim, Notebooks

**Python Packages** PyTorch, PySpark, scikit-learn, NumPy, Pandas, Flask, Matplotlib, Seaborn, spaCy

# **Experience**

### **Ministry of Health and Long-Term Care**

Toronto, Canada

APPLICATION PROGRAMMER

Sept. 2020 - Aug. 2021

- Independently Created 2 Proof-Of-Concept applications for Distributed Log-Stream Processing with Scalability in focus; implemented on ministry servers and Azure Cloud Platform:
  - 1. Using Azure Event Hubs, Functions and Azure SQL
  - 2. Using Spark Streaming from Kafka & NiFi data flow management alongside HDFS

Additional work included: Writing Producers for tailing log files, Email Alerts, parsing, etc.

- Configured 6-node cluster where I Installed and Configured many Software and Big Data Technologies (Spark, Kafka, Hadoop, PostgreSQL, etc.) on Multi-Node Cluster (6 Nodes) intended for use by other developers and second POC application
- Debugged and finished incomplete Python Application to automate excel reports' formatting for Ontario Disability Requirements
- Performance Tested multiple applications with JMeter to determine maximum concurrent users resulting in clearance for Production use
- · Wrote Scripts in JavaScript and Python for GUI to change and backup web-pages in production server

### **Education**

Ryerson University Toronto, Canada

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.74 - DEAN'S LIST '19 - '20

September 2018 - May 2023

- Currently 4th Year Computer Science Student
- Minor in Mathematics
- Relevant CS Coursework: Machine Learning, Data Structures, Algorithms, Databases, Functional and OOP
- Relevant Math Coursework: Calculus and Computational Methods, Linear Algebra, Discrete Math, Probability and Statistics

# Projects\_

### **Transformer Implementations Package: GitHub**

Open Source Contribution

PYTHON | PYTORCH | DEEP LEARNING | NATURAL LANGUAGE PROCESSING | COMPUTER VISION

Nov 2020 - Ongoing

- Published Package on PyPi
- Implemented multiple Transformer neural networks from scratch with extensive documentation
- Trained and optimized the models implemented
- Models used in tasks such as Image Classification and Sequence-to-Sequence translation
- Models: Vision Transformer(ViT), Data efficient image Transformers(DeiT), GPT, BERT, Vanilla

### Image Generation with GANs & Auto-encoders: GAN library & VAE - Faces

PYTHON | PYTORCH | GENERATIVE MODELING | DEEP LEARNING | COMPUTER VISION

Open Source Contribution

Jan 2021 - Ongoing

- Published Package on PyPi
- Implemented multiple GANs and Auto-encoders from scratch
- All models trained and optimized producing realistic images
- Models Implemented: StyleGAN, DCGAN, WGAN, SNGAN, Variational Autoencoder, etc.

### Neural Style Transfer Web App: GitHub

FLASK | DOCKER | PYTHON | PYTORCH | COMPUTER VISION

Open Source Contribution

May 2021

- Flask Web App containerized with Docker to Combine the Style from an Image to another
- Through Web Interface you can customize training process and run transfer in backend