

Nguyen Duy Thong (Jase) Tran

Software Developer

duythongvt1@gmail.com | [linkedin.com/in/tranndt](https://www.linkedin.com/in/tranndt) | github.com/tranndt | +1 (431) 335 4421 | Winnipeg, MB - Open to relocate.

SKILLS

Data Science (Python, R)

- Machine learning, Deep learning, Data engineering, Data analysis, Pandas, NumPy, Scikit-learn, PyTorch, Transformers, W&B, Matplotlib, Seaborn, Plotly, MS Azure ML Studio, IBM SPSS.

Full Stack Development (JS, CSS, HTML, XML, JSX)

- React.js, Node.js, Express.js, MongoDB, Docker, Kubernetes, Django, Flask, Bootstrap, HTTP requests, REST APIs, Microservices, Serverless, JSON.

Software Development (Java, C/C++, C#, Swift)

- Data structures and algorithms, OO programming, Testing, Agile methodologies, CI/CD, Project management, Android Studio, Xcode, Unity Engine, GitHub, MS Azure DevOps.

Database Management & Administration (SQL)

- Database warehouses, ETL Processes, Pivot tables, Dashboard, Business Intelligence tools, MS SQL Server, MS SSIS, MS Excel, MS Power BI, Oracle Banner.

WORK EXPERIENCE

Data Analyst

01/2024 - 07/2024

DataAnnotation

Remote, Winnipeg, MB

- Contributed** to the training of GPT chatbots by **designing** and **solving complex coding problems**, significantly enhancing the quality and performance of AI-generated code.
- Evaluated** and **optimized** AI-produced code for **accuracy** and **efficiency**, providing detailed feedback that **boosted chatbot capabilities**.
- Authored** and **reviewed** high-quality code snippets in **Python**, **JavaScript**, and **SQL**, contributing to the improvement of GPT models.

Data Analytics Developer (Co-op)

01/2022 - 12/2022

Manitoba Hydro

Winnipeg, MB

- Spearheaded** the development of a **cloud-based machine learning solution** on **MS Azure** to classify customer credit risk, achieving **0.90+ balanced accuracy** and **F1 scores** on datasets exceeding **1 million entries**. This **innovation** significantly enhanced debt prevention and recovery processes, earning praise from managers and business executives.
- Engineered** and **managed large-scale datasets** using **MS SSIS** and **MS SQL Server**, performing **advanced data integration** and **troubleshooting** complex data workflows to ensure seamless data operations.
- Collaborated** with cross-functional stakeholders to **design** and **implement** a machine learning solution with **customized scoring functions**, meeting customer requirements while **ensuring compliance** with privacy and ethical AI standards, effectively replacing an outdated legacy system.
- Led** the **end-to-end development** and deployment of the application, incorporating comprehensive **project management tasks** including **documentation**, timeline management, and cross-team coordination to deliver the project on time and within scope.

Lead Undergraduate Research Assistant (Co-op)

05/2021 - 08/2021

University of Manitoba's Database and Data Mining Lab

Winnipeg, MB

- Developed** advanced **autoencoder** neural network models for COVID-19 classification in a **few-shot learning** environment using **PyTorch** and managed experiments with **Weights & Biases**, achieving up to **20% improvement** in sensitivity and F1-score over other models.
- Executed full-cycle ML development**, from **data analysis** to **algorithm development** and **result evaluation**, driving research breakthroughs in collaboration with the team, contributing to **three IEEE journal publications**.
- Won 1st Prize in the **Bison Transport's Nexus Data Challenge 2021** by creating an **LSTM model** for traffic imbalance forecasting with **0.90 accuracy** and optimizing traffic scheduling with a sliding window algorithm.

EDUCATION & CERTIFICATES

IBM Full Stack Software Developer Professional Certificate

08/2024

- Mastered front-end, back-end, and cloud-native application development** through a 15-course certificate, acquiring expertise in Node.js, React, CI/CD, Docker, Kubernetes, OpenShift, NoSQL, Django ORM, Microservices, and Serverless and Cloud computing.
- Developed** a wide range of practical projects, including **Node.js** and **React.js** apps, containerized guestbooks (**Docker**, **Kubernetes**), database apps (**Django ORM**, **Bootstrap**), and AI programs (**Cloud Foundry**, **NoSQL**) and a dealership reviews website **capstone project**.

Bachelor of Computer Science (Honours) | GPA: 4.05/4.50

08/2018 - 06/2023

University of Manitoba

Winnipeg, MB

- Specialized** in Software Engineering, Machine Learning, Databases, and Statistics.
- Achievements:** ICM Academic Merit Scholarship (2019), ICM Leadership Excellence Award (2020), Undergraduate Research Award (2020), Undergraduate Summer Research Award (2021), International Undergraduate Student Scholarship (2021).

PROJECTS

- **“RSNA Breast Cancer Detection” (CV, Python):** Developed and fine-tuned **Vision-Transformers** and **ResNet50-based CV models**, achieving a **0.70 accuracy score** in classifying RSNA breast cancer images across a large dataset.
- **“Winnipeg Transit On-Time-Performance Analysis” (Python):** Conducted a regression analysis on traffic volume and construction closures, improving **Winnipeg Transit** timeliness with an effective **0.75 R2-score**.
- **“UMHUB - University Hub” (Android, Java):** Designed and developed an Android app serving as a comprehensive information and discussion platform for university students.