

- Tesla**
Software Engineer Intern

Sept 2022 — Dec 2022
San Francisco Bay Area, California

 - Developed a real-time change data capture (CDC) pipeline to replace an outdated batch data export system which often took upwards of 1 hour using **Apache Kafka**, **Pyspark** and **Delta Lake** on **Databricks**.
 - Saved engineers 4 hours of weekly manual testing by building an automated deployment test pipeline for an ELT system.
 - Decreased development time of data analysts by 40% by building a tool to mock test and integrate ELT schema changes.
 - Designed the architecture for an automated cost-saving contract analysis tool that proposes cost optimizations to supply managers based on given business rules.
- Wealthsimple**
Software Engineer Intern

May 2022 — Aug 2022
Toronto, Canada

 - Architected and implemented a code-as-compliance repository for access management of personally identifiable information (PII) in the data warehouse for Wealthsimple's SOC 2 compliance certification using **Satori** and **Terraform**.
 - Built a data-access request system for access to PII in the data warehouse. The system integrates with the Wealthsimple **Jira Service Board** and consults data domain experts via **Slack** for access approval using **Python** and a **Flask** backend.
 - Increased development rate and error visibility in the managed machine learning system at Wealthsimple by building log and queue reporting for **Celery** training workers.
 - Relevant blog posts: [\[1\]](#) [\[2\]](#)
- Bookmark | AI-Powered Website Builder**
Machine Learning Engineer Intern

May 2021 — Aug 2021
Toronto, Canada

 - Saved data scientists 20 hours/month of manually training models by Automating the training and integration/unit testing of 10 sequentially trained machine learning models in **Python** using **Apache Airflow**.
 - Built a horizontally scalable data pipeline using **AWS Batch**, **SQS**, **S3**, **ECR**, **Apache Airflow**, and **Apache Spark** to reduce data export time by 30% and improve data reliability and error tolerance.
 - Improved model engineering to reduce bugs, allow for more reusable code, and increase the rate of model development.
- Magellan Aerospace Limited**
Summer Web Developer

May 2020 — Aug 2020
Winnipeg, Canada

 - Migrated a collection of web apps written in **PHP** to **ASP.NET (C#)** to improve performance and security and updated the frontend of those web apps using **HTML**, **CSS**, and **Javascript**.