Oliver K. Pan

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SKILLS

Programming Languages: Python, SQL, HTML, CSS, JavaScript (NodeJS, ReactJS), Java, R
Data Science: pandas, numpy, seaborn, matplotlib, plotly, Jupyter Notebook, FBProphet, Tableau
Machine Learning: scikit-learn, Keras, Tensorflow, PyTorch

WORK EXPERIENCE

Data Management Operations Intern, *Ontario Teachers' Pension Plan*   *09/20 - 12/20*
- Manages **ETL** process, using applications such as **MS SQL Server** and **Oracle EDQ** for data valuation.
- Constructed automated **Python** checks, notifying cross-functional teams of data exceptions through email notifications.
- Creates and manages scripts, accessing large databases writing **SQL** Queries and developing reports using **pandas**.

Data Scientist Intern, *Royal Canin/Mars Inc.*   *06/20 - 08/20*
- Filtered **300,000** consumer purchases by building machine learning models such as **Random Forest** and **XGBoost** to provide actionable insights, which resulted in company investment of **$30,000** into marketing activities.
- Developed **A/B tests** on four years of historical data to analyze impact of promotions on subscription service, then presenting results to cross-functional teams and generating **$100,000** investment in future promotions.
- Assisted veterinarians in quick diagnosis of urolith stones by analyzing **60,000** submissions, deploying web application using **Streamlit** from a **CatBoost** model, and conducting cross-validation for an accuracy of **90% F1 Score**.
- Analyzed over **three million** transactions, identifying **1800** animal clinics using label propagation, which impacted business performance by identifying a potential **250% growth** on e-commerce platform.

Data Analyst Intern, *CardSwap Inc.*   *09/19 - 12/19*
- Increased transaction processing speed by **25%**, successfully identifying and analyzing the data of over **500+** customers, which resulted in business transactions of over **$4000** daily.

Undergraduate Teaching Assistant, *University of Toronto*   *09/19 - 12/19*
- Corrected and assessed **60+** assignments and **70+** exams partnering with a team of eight teaching assistants to support a course (MGTA05 - Foundations of Business Management) with a class size of **300+** students.

EDUCATION

Honours Bachelor of Science (HBSc) - Statistics, University of Toronto   *2018 - 2023*
Bachelor of Business Administration (BBA) - Business Management, University of Toronto   *2018 - 2023*
- Technical Coursework: Linear Algebra, Calculus for Physical Sciences, Quantitative Methods, Computer Science (Python)

PROJECTS

House Price Prediction with Advanced Regression
- Predicted house prices with an accuracy of **<0.05 normalized RMSE**, using various regression techniques such as **Logistic Regression** and **Booster Trees** on **80+** variables, to deploy a model with **Streamlit.**

Yelp Open Dataset
- Performed analysis on COVID-19 data, creating an unsupervised machine learning model (**K-means**) to analyze over **200,000+** businesses and response to pandemic.

US Traffic Time Series Analysis
- Explored time series data with over **40+** variables, forecasting US Traffic Accidents in 2021 using statistical models such as **FBProphet** and **ARIMA**.