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**.