# Oliver K. Pan

github.com/oliverkpan oliverkpan.github.io www.linkedin.com/in/oliverpan in

# oliver.pan@mail.utoronto.ca | (416) 832-0873 🚨

## **SKILLS**

Programming Languages: Python, SQL, HTML, CSS, JavaScript (NodeJS, ReactJS), Java, R Data Science: pandas, numpy, seaborn, matplotlib, plotly, Jupyter Notebook, FBProphet

Machine Learning: scikit-learn, Keras, Tensorflow, PyTorch

Software Tools: Microsoft Excel, Tableau, Git, Github, Visual Studio

#### WORK EXPERIENCE

### **Data Management Operations Intern,** Ontario Teachers' Pension Plan

09/20 - 12/20

- Manages ETL process, using applications such as SQL, Bloomberg, 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 utilizing Python, implementing reports using pandas.

#### Data Scientist Intern, Royal Canin/Mars Incorporated

06/20 - 08/20

- Filtered 300,000 consumer purchases, by building machine learning models such as Random Forest and identifying key features using SHAP to predict consumer sign-up to subscription service, identifying actionable insights which resulted in company investment of \$30,000 into marketing activities.
- Identified key promotions from four years of historic data, carrying out A/B tests to analyze effect of promotions on service subscription, 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 CatBoost model, and conducting cross-validation for accuracy of 90% F1 Score.
- Analyzed over three million transactions, identifying 1800+ key clinics using label propagation and gradient boosted trees, leading to a potential 250% growth on e-commerce platform.

#### **Data Analyst Intern,** CardSwap Inc.

09/20 - 12/20

• 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**

09/20 - 12/20

• 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* Bachelor of Business Administration (BBA) - Business Management, University of Toronto

2018-2023 2018-2023

• Quantitative Coursework: Calculus (Management & Physical Sciences), Linear Algebra, Quantitative Methods for Economics (Statistics), Computer Science, Microeconomics, Price Theory, Corporate Finance

#### **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, deploying final model with Streamlit & Heroku.

#### **Yelp Open Dataset**

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

#### **US Traffic Time Series Analysis**

 Demonstrated strong exploratory data analysis on over 40+ variables, forecasting US Traffic Accidents in 2021 using statistical models such as FBProphet and ARIMA.

#### **AWARDS**

**DECA International Finalist** - Competed in Atlanta against over 2000 students in a stock pitch, placing Top 10 globally. MESA Associate of the Year - Awarded for outstanding effort during the 18/19 Year, directing an event with 300+ guests.