# Oliver K. Pan

github.com/oliverkpan liverkpan.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

Machine Learning: scikit-learn, Keras, Tensorflow

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

# WORK EXPERIENCE

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

09/20 - 12/20

- · Controls data management process, using applications such as SQL, Bloomberg, Oracle EDQ, for data valuation
- · Creates and manages scripts, accessing large databases utilizing Python, implementing reports using pandas

#### **Data Scientist Intern,** Royal Canin Canada

06/20 - 08/20

- Filtered 300,000 consumer purchases, building various machine learning models such as Random Forest and identifying key features using SHAP, to predict consumer sign-up to subscription service, which resulted in company investment of \$30,000 into marketing activities
- Identified key promotions from historic data, carrying out A/B tests and inferential statistics to analyze effect of promotions on service subscription, resulting in \$100,000 dedicated to promotional events and email campaigns
- Assisted veterinarians in quick diagnosis of Urolith stones by analyzing 60,000 submissions, deploying web application using Streamlit, creating CatBoost model and conducting cross-validation for accuracy of 90% F1 Score
- Successfully analyzed over 3 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 speed by 25%, successfully identifying and analyzing the data of over 500+ customers, which resulted in business transactions of over \$3000-\$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**

# **BBA Management & Information Technology Specialist (Co-op), University of Toronto**

2018-2023

- Pursuing a Double Minor in Computer Science & Applied Statistics
- **Cumulative GPA:** 3.38/4.00
- Quantitative Coursework: Calculus, Linear Algebra, Quantitative Methods for Economics (Statistics), Computer Science

# **PROJECTS**

#### **House Price Prediction with Advanced Regression**

• Predicted house prices given 80+ variables, using various regression techniques such as Logistic Regression and Booster Trees. Various metrics utilized for analysis such as MAE and RMSE. Model soon to be deployed with Flask and 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. Extended various EDA techniques to clean and present data in a professional way

### **Fantasy Hockey League Statistics Predition**

• Utilizing heat maps (Seaborn) and data visualization (Numpy/Matplotlib), the model would analyze trends in fantasy hockey, given category scores and player statistics. Further implemented scikit-learn, to predict scores.

#### **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