# Oliver K. Pan

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**in** oliverpan

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## **SKILLS**

Programming Languages: Python, SQL (Oracle, MS SQL), HTML, CSS, Git

Data Science: pandas, numpy, seaborn, matplotlib, plotly, Streamlit, Jupyter Notebook, FBProphet, Tableau

Machine Learning: scikit-learn, Keras, Tensorflow, OpenCV, nltk

### **WORK EXPERIENCE**

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

09/20 - 12/20

- Manages databases and data pipelines, using applications such as MS SQL Server for data querying.
- Automated **Python** scripts, saving ~2 hours of daily work and notify cross-functional teams by email notifications.
- Develops ETL process, writing 100+ SQL queries and building data quality checks using Datanomics.

#### Data Science Intern, Royal Canin/Mars Inc.

06/20 - 08/20

- Filtered **300,000** consumer purchases by building machine learning models such as **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, successfully working with cross range of teams to generate \$100,000 investment for future promotions.
- Assisted veterinarians in 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**.

#### 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**

Bachelor of Science (HBSc) - Statistics, University of Toronto

2018 - 2023

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

2018 - 2023

• Quantitative Coursework: Linear Algebra, Calculus, Quantitative Methods, Computer Science (Python)

## **PROJECTS**

#### **lowatch**

• Scraped pricing data with **BeautifulSoup**, combining data sources to predict 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**.

#### Menda

- Developed mental health management application which utilized **OpenCV** for emotion detection and **nltk** for sentiment analysis, resulting in personalized media recommendations for mental wellbeing.
- Deployed at Hack Western 7 and awarded **Best Health Hack**, placing **1st** out of 180+ participants.