# Oliver K. Pan

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**in** oliverpan

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# **SKILLS**

**Programming Languages:** Python, SQL (Oracle, MS SQL, MySQL), HTML, CSS, JavaScript (NodeJS, ReactJS) **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 large databases and various 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, accessing large databases writing 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 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.

#### 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 (BSc) - Statistics, University of Toronto

2018 - 2023

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

2018 - 2023

- Minoring in Computer Science
- Quantitative Coursework: Linear Algebra, Calculus for Physical Sciences, Quantitative Methods, Computer Science (Python)

# **PROJECTS**

#### Iowatch

• 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.
- This project was deployed at Hack Western 7 and was awarded Best Health Hack, placing 1st out of 41 teams.