

# Oliver K. Pan

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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 per week, notifying cross-functional teams by email.
- 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 (BSc) - 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

## 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.