





# Dylan Lee

[linkedin.com/in/dylanktlee](https://www.linkedin.com/in/dylanktlee)   
[dylan.lee@hotmail.com](mailto:dylan.lee@hotmail.com)   
[github.com/dktlee](https://github.com/dktlee)   
(416) 312-7550 

## Experience

### Data Scientist

May 2019 - Dec 2019

#### Ritual.co, Toronto

- Constructed experiment analysis frameworks: setup ~10 Looker dashboards to monitor KPIs, conducted frequentist inference and bayesian analysis to help product teams roll out ~5 new features
- Used Python to implement DBSCAN clustering algorithm to automate strategy, sales, and expansion tasks
- Developed a Flask app using association rules and collaborative filtering algorithms to email recommendations to customers, increasing user engagement KPI by 18%
- Created and implemented a survival analysis Shiny R app to forecast user purchase behaviour, moving conversion rate by 32%
- Modelled merchant lifetime value based on various cohorts, improving acquisition rates and reducing marketing costs

### Consulting Intern

Sept 2018 - Dec 2018

#### Ernst & Young, Chicago

- Responsibilities ranged from core audit support, client assumption reviews, product analysis, and valuation/financial reporting
- Designed an Power BI tool that visualizes and analyses clients' products improving internal processes from 3 weeks to 2 hours
- Programmed cash flow modelling in VBA to value insurance policies by applying mortality and interest rate assumptions

### Actuarial Intern

Jan 2018 - Apr 2018

#### Munich Re, New York City

- Analyzed asset portfolios of companies from S&P Global MI databases to estimate value of potential clients and measure risk
- Used regression techniques to fit liner and logistic models to large datasets to enhance pricing matrix
- Built financial modelling script in Matlab that automatically applied market stresses and calculated financial value of transactions

## Projects

### All-NBA Team Predictions

R/RStudio

- Created a logistic regression model to predict the All-NBA team after a given season by evaluating their performance and stats
- Forecasted player stats for future seasons to predict how many times a specific player will be selected for the All-NBA team
- Ran simulations to estimate the total number of All-NBA selections remaining in a certain player's career and calculated the likelihood that player has the most number of selections among the league

## Skills

- Python, R, Matlab, SQL, BigQuery, SAS, Looker, Power BI, Git, JIRA, Confluence, VBA, GSuite
- Data wrangling, data visualization, data analysis
- Experimental design & execution, statistical analysis
- Construction of empirical and parametric models, bayesian analysis

## Education

### Bachelor of Mathematics - 2020 Statistics & Actuarial Science

#### University of Waterloo, Honours

- Dean's Honours List
- 4.0 GPA
- Basketball & hockey

### Relevant Course Work

- Forecasting, Linear Algebra, Experimental Design, Statistical Classification, Applied Probability, Generalized Linear Models

## Achievements

- EY International Intern Leadership Award July 2019
- ASA DataFest Winner May 2019
- ASNA Case Competition Winner Jan 2018
- 4 Actuarial Exams 2016 - 2018

## Interests

- Follow all major sports and play basketball, hockey, and volleyball
- Fantasy leagues (NBA, NHL)
- Travelling
- Video games
- Concerts and Music Festivals