# Minnie Nguyen

Data Scientist · Math & Computer Science · McGill University

#### Work Experience \_\_\_\_\_

Dynamicly Inc.

Montreal, Canada

DATA SCIENCE INTERN

Jun 2019 - Present

- Initiated a 3-person project to build an in-house NLP model to power conversational intelligence, which increased accuracy by 29% and eliminated the need to outsource.
- Worked closely with backend developers to deploy the model into production as a HTTP server with over 250 users.
- Collaborated with the product manager to enforce client requirements and wrote unit tests using PyTest to enforce branch coverage.
- · Created analytics dashboards pulling data from production to assess the model's performance and gain user insights.

#### McGill University, Schulich School of Music

Montreal, Canada May - Aug 2018

STUDENT SOFTWARE DEVELOPER

- Implemented 8 new functionalities for a web-based image classification software used by musicologists at McGill University, using JavaScript and Django.
- Analyzed runtime performance to find bottlenecks. Optimized the performance of certain functionalities by up to 90%.
- Presented about the software and its advancements at multiple workshops at McGill University.

## Skills \_

**Programming** Python (Scikit-Learn, Pandas, NumPy) · Git · NoSQL · SQL · JavaScript · Java

Machine Learning Classification · Natural Language Processing · Jupyter Notebook · Cloud (GCP, Azure)

Analytics Data Mining · Data Visualization (Matplotlib, Power BI)

## Projects \_\_\_\_\_

For more projects, visit https://nminnie.github.io

Natural Language Processing: Topic Classification (Scikit-Learn, Pandas, NumPy, Matplotlib, Flask)

- Collected Amazon reviews for 8 product categories from various sources and transformed them into a unified dataset.
- Performed exploratory data analysis, cleaned the text data, constructed features using tokenization and TF-IDF, performed model selection using cross validation, and fine-tuned the classifier.
- Deployed the model as a web app using Flask.

Time-series Analysis: Price Forecasting (Scikit-Learn, StatsModel, Pandas, NumPy, Matplotlib)

• Performed analysis to identify trends and seasonality of historical avocado prices and trained an ARIMA model to forecast future prices with a low RMSE of \$0.127.

**Recommendation System: Books** (Scikit-Learn, Pandas, NumPy)

• Trained a kNN model that uses collaborative filtering to recommend the top-n most similar books based on 6 million user ratings.

Bank SQL Database (PostgreSQL, pgAdmin)

• Designed and created a relational database for a banking institution in PostgreSQL, which models entities (employees, clients, transactions, loans, etc.) and their relationships.

#### Education \_\_

**McGill University** 

Montreal, Canada

Sep 2015 - May 2019

- B.Sc. MATH & COMPUTER SCIENCE, Average: A
- · Awards: Major Entrance Scholarship, Tomlinson Engagement Award for Mentoring (4-time recipient)
- <u>Courses</u>: Applied Machine Learning, Statistics, Probability, Linear Algebra, Algorithms & Data Structures, Software Design, Database Systems, Stochastic Processes