Junn Hei Jonathan Cho

University of Waterloo | Management Engineering Candidate

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Summary of Qualifications

- Developed an interactive dashboard that predicts risks to a 90% accuracy employing Machine Learning principles to aid the development of counter-measures within Home Depot
- Competency with Data Science and Statistical principles acquired through extensive dataset analyses and trend recognition in personal projects

Relevant Experience

Developer, Data Analytics | The Home Depot Canada **Jan 2018 – Apr 2018**

- Developed an interactive dashboard that predicts problems with 90% accuracy by employing Machine Learning principles in Python
- Created SQL queries and contributed logic to Java backend to support sales analysis and order journey efficiency streamlining
- Rectified $500,000 of sales discrepancies by correcting SQL queries for 15 reports by validating against an SAP BW database and participating in Scrum meetings

Research Assistant | University of Waterloo **Sept 2017 – Present**

- Implementing Multi-Task Learning in TensorFlow for Amazon product suggestions
- Analyzed and tested various advanced models for Natural Language Processing like RNNs, Auto-encoders, Variational techniques and Word Vectors

Education

Management Engineering B.ASc | University of Waterloo **Expected 2021**

- Cumulative Average: 84.45% (GPA: 3.64/4.0) | Top 15 in program
- Awards: President's Scholarship of Distinction, Dean's Honour List

Select Projects

Help Desk Ticket Analysis Dashboard | *Python, Tableau*

The Home Depot Canada

- Cleaned large amounts of unstructured linguistic data using NLTK and Pandas
- Explored semantic data in tickets using DBSCAN and Word Vectors from SciKit-Learn and Gensim
- Devised a model using LSTMs and a feed-forward architecture in Keras that classifies help desk tickets based on semantic content with 90% accuracy
- Created interactive visualizations of geographic and time variables in Tableau

Chat-Bot | *Python* | Link

- Implemented Variational Recurrent Encoder-Decoder model from literature with Keras
- Cleaned Cornell Movie-Dialog Corpus into sequences of Word Vectors using Pandas and Gensim
- Train and evaluated the model's ability to generate human-like responses

Basketball Data Exploration Project | *Python* | Link

- Mined Basketball Data using Pandas collected from various websites using Beautiful Soup
- Explored data using Matplotlib and Seaborn with Box plots and Multivariate Distributions
- Performed statistical analyses like Chi-Squared Testing and confidence intervals to find correlations between NBA players' defensive statistics and perception of defensive skill