Jared Arcilla

MACHINE LEARNING ENGINEER

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Education

University of Waterloo Waterloo

BACHELOR OF MATHEMATICS, STATISTICS - 4TH YEAR

Expected: August 2021

Skills

Languages Python, R, Julia, SQL

Tools PySpark, PyTorch, Numpy, Tidyverse, Base R Statistics Tools

Machine Learning Embeddings, Recommender Systems, Survey Statistics, Generalized Linear Models, Stochastic Processes

Experience ____

Yelp - Core M.L. Team San Francisco, CA

Machine Learning Engineer

Jan. 2020 - Apr. 2020

- · Headed the end-to-end project to create business embeddings for use in recommender systems and machine learning models
- Built a pipeline to input months of Yelp user session data into Word2Vec models using PySpark
- Analyzed the quality of embeddings using dimension reduction techniques such as KMeans, PCA, and TSNE
- Compared predictive ability of embeddings by applying them to XGBoost models

Deloitte - Omnia AI Ottawa, ON

Data Science Analyst Jan. 2019 - Apr. 2019

- Prototyped an algorithm that recognizes misuse of company logo on webpages using OpenCV and PyTorch leading to a contract with a Deloitte
 client
- Trained logistic regression models to provide insight into the conditions that lead to a consumer purchase using SAS
- Defined best practices for the clients' data scientists using the SAS tools that had just been installed

CIBC - Digital Toronto, ON

JUNIOR ANALYST

- Designed dashboard visualizations detailing user purchases using Tableau and SQL
- Automated a process of finding webpage ID's by building a webscraper using Python and Selenium, saving the company hundreds of labor hours

Research _

Wilfrid Laurier University - Department of Mathematics

Waterloo, ON

Undergraduate Research Assistant

May 2020 - Aug. 2020

Jan. 2018 - Apr. 20189

- Implemented clustering algorithms such as PAM and KMeans to dissect patterns in financial stress with R
- Studied the effects of COVID-19 on the economic health of Canadians, for use in a press release
- Built classification models to recognize different levels of financial difficulty in survey participants

Projects _

MusicProcessing.il

OPEN SOURCE, DIGITAL SIGNAL PROCESSING

2020

· Restored functionality to a Julia library that performs audio processing faster than similar Python libraries

Dog Image Generator

IMAGE SYNTHESIS 2019

- Implemented computer vision algorithm that generates realistic images of dogs using PyTorch
- · Referred to DCGAN and GAN research papers to improve the algorithm's effectiveness