

# JARED ARCILLA

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## WORK EXPERIENCE

Coinbase - Software Engineer

May - Aug 2021

- Used **Go** and **Locust** to implement virtual users that **load tested the payments team's services** to find bottlenecks
- Built a **scaled down infrastructure** with **AWS** that mirrored production environment for load testing
- Created **Datadog dashboards** to gain insights into how the environment reacts under a load

Yelp - Software Engineer

Jan - Apr 2020

- Headed the end-to-end project to train business embeddings for **recommender systems** and **machine learning models**
- Engineered a pipeline to transform and load millions of user data into **Word2Vec models** using **Python** and **PySpark**
- Analyzed the quality of embeddings using dimension reduction techniques such as **KMeans** and **TSNE**

Deloitte - Data Science Analyst

Jan - Apr 2019

- Prototyped an algorithm that **recognizes misuse of company logo** 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 - Junior Analyst

Jan - Apr 2018

- 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**

## EDUCATION

University of Waterloo

2016 - 2022

BMath, Statistics

## RESEARCH

Wilfrid Laurier University

- 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** by the Canadian Payroll Association

## SKILLS

- **Languages:** Python, R, Julia, Go, Ruby
- **Tools:** PySpark, PyTorch, Numpy, Pandas, AWS

## PROJECTS

- **MusicProcessing.jl** - restored functionality to an open source Julia library that performs audio processing faster than Python alternatives
- **Dog Image Generator** - implemented DCGAN algorithm using Python and PyTorch to generate realistic images of dogs
- **Pokemon Winner Predictor** - utilized decision trees to predict the probability of winning based on Pokemon matchup