

Anmol Mago

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<http://anmolmago.com>

Education

University of Waterloo • Bachelors of Software Engineering

2015 – 2020

Software Engineering Experience

Siri Intern • Apple

Sept 2017 – Dec 2017

Data Infrastructure • Machine Learning • Spark • Hadoop • Scala • Python • Java

- Coordinated with iTunes teams to extend Siri's underlying Spark and Hadoop infrastructure for features in the unreleased Apple HomePod
- Applied data analysis and statistical experiments to help improve current understanding of Siri data, to identify problems in production, and to validate data for future products
- Built Spark and Hadoop infrastructure to replace Siri's data access layer
- Used factor analysis and clustering to explain failures in Siri infrastructure
- Built web tool for all Siri data consumers to showcase data analysis, entity relationships and analytical use cases for data streams

Risk Intern • Shopify

Jan 2017 – Apr 2017

Machine Learning • Computer Vision • Natural Language Processing • Spark • Kafka • Python • Ruby • C

- Implemented an end-to-end machine learning pipeline to identify banned products using image and text data; achieved 99.6% accuracy for Shopify Payments and Apple Pay
- Applied gradient boosting to predict future sales of merchants; the model has been trusted in the distribution of over \$130 million in cash advances to date
- Developed framework for real-time fraud predictions with Kafka streams to import and run machine learning models from XML in a Ruby environment

Infrastructure Intern • Shopify

May 2016 – Aug 2016

Spark • Hadoop • Cassandra • Python • Go

- Led team to build data models and real-time data aggregates; sped up queries by 500%
- Extended Go service to fulfill many database queries in one iteration
- Added support for token rotation in Shopify's app authentication

Projects and Extracurricular Experience

Self-Driving Car Nanodegree

<http://amago.ca/1>

Deep Learning • Computer Vision • Localization • Control

By Uber, Mercedes-Benz, Udacity and more

- Applied algorithms to identify lanes and vehicles from real-world video using OpenCV
- Used behavioral cloning to autonomously steer simulated vehicles with only image data
- Implemented object tracking algorithms for Lidar and Radar data

Artificial Intelligence Nanodegree

<http://amago.ca/2>

Search • Optimization • Probabilistic Models

By Amazon, IBM, Udacity and more

- Implemented search to solve complex planning problems and win adversarial games
- Created sign language interpreter using Hidden Markov Models

Augmented Reality Rubik's Cube Aid

<http://amago.ca/3>

- Built agent to locate Rubik's Cube in real-time video; working on reading and solving cube

Vex Robotics – World Championships

- Created robot to manipulate objects and autonomously move using a PID control algorithm in C