MAX GILLHAM
DATA SCIENTIST

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EDUCATION

Queen's University
BAS Applied Mathematics & Computer Engineering 2019
Sept. 2015 to Current

EMPLOYMENT

InFeild ID
Data Scientist
Remote
Aug. 2018 to Current

• Developed a suite of supervised machine learning algorithms to various plant pests and invasive species
• Engineered data pipeline including image processing and data augmentation
• Trained and deployed models to production in iOS app
• Built additional micro services for app functionality

RBC Amplify - Capital Markets
Data Scientist
Toronto, ON
May 2018 to Aug. 2018

• Worked on a team of 4, tasked to create an artificial intelligence based recommendation engine for RBC Capital Markets
• Built a working product to showcase and present to end users and stakeholders
• Developed micro services to exploit under-utilized data with supervised and unsupervised machine learning
• Engineered data flow through queries, cleaning and normalization
• Product was filed for a provisional patent

PROJECTS

8D Audio
Oct. 2018 to Current

A tool to convert any song to "8D Audio". 8D Audio is characterized by switching sound between stereo channels to give the effect of the music coming from 8 directions. Built using Librosa and digital signal processing.

Structurall (Hack MIT)
Sept. 2018

Created a web-app to add structure to phone call audio. Used Revspeech API to map speech to text and Microsoft's Azure Text Analytics to conduct sentiment analysis and locate key phases.

NFLSenp.ai (Qhacks)
Feb. 2018

A basic web-app to predict the winner of NFL games by leveraging supervised machine learning. Developed by analyzing marginal statistics of two competing teams from MySportsFeeds API and trained a binary classifier in TensorFlow.

Reinforcement Learning Algorithms for Algorithmic Trading
Sept. 2018 to Current

Final year thesis group project. Given the topic of stochastic control and reinforcement learning, the team focused on applying reinforcement learning to common stochastic control problems in high frequency electronic trading.

AWARDS

Patent Filing
Aug. 2018

Titled as Inventor for a provisional patent with respect to a suite of machine learning algorithms built over summer work term

Hack MIT Finalist
Sept. 2018

Placed top 10 out of 1000 students at MIT's annual Hackathon for Structurall project.

Best Innovative Use of Artificial Intelligence
Sept. 2018

Achieved at Hack MIT for Structurall project

Best Domain Name
Feb. 2018

Awarded best domain name at Qhacks 2018 (NFLSenp.ai)

SKILLS

LANGUAGES: Python, Matlab, Java, SQL, JavaScript, C/C++
TECHNOLOGIES: Supervised/Unsupervised Machine Learning, Data Visualization, Data Modelling, Data Analysis

ACTIVITIES

Hackathons · Participant
Qhacks, HackMIT, Microsoft Code Challenge

WildCard (Band) · Lead Guitarist
Participated in a 5-piece rock band, performing weekly