Bryan Pui Yin Chan

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EDUCATION

UNIVERSITY OF TORONTO
MSc in Applied Computing
2018 - 2019

Related Courses:
Deep Reinforcement Learning
Imitation Learning
Storage Systems
SSD Analysis
Edge Computing

H. BSc in Computer Science
2013 - 2018
Software Engineering Specialist (Co-op)
Dean's List (2016 - 2018)

TEACHING ASSISTANT

UNDERGRADUATE
Artificial Intelligence
Machine Learning & Data Mining
Algorithm Design & Analysis
Computability & Complexity
Data Structure Design & Analysis
Theory of Computation

SKILLS

PROGRAMMING
Python • C • Java • C# • Bash

ML
PyTorch • TensorFlow • OpenAI Gym

WEB
HTML • CSS • JavaScript
Angular • React
Node.js • Express • .NET

DATA PROCESSING
NumPy • SQL • MongoDB
Entity Framework

DEVOPS
Docker • Jenkins • IBM UrbanCode

INTERPERSONAL

LANGUAGES
English (Fluent)
Cantonese (Fluent)
Mandarin (Proficient)

EXPERIENCE

KINDRED AI | AI Engineer
Toronto, ON, Canada
May 2019 - December 2019
- Developed a novel model-based average reward RL algorithm to optimize a continual process, which directly optimizes for a KPI of SORT
- Researched on RL algorithms to improve the performance of SORT, a robotic arm with 7 degrees of freedom that sorts item into cubbies

ONTARIO TEACHERS' PENSION PLAN | Programmer Analyst
North York, ON, Canada
May 2017 - August 2017
- Migrated Jenkins projects to IBM UrbanCode Deploy and Nexus, speeding up the automation process and reducing amount of human interventions
- Created and maintained modules and templates to perform automated deployment, standardizing the deployment process across the IT department

May 2016 - August 2016
- Built a web application using .NET and Angular for managers to monitor real-time status of services in different environments
- Created RESTful web service and command line application for Automic (UC4) that allow users to retrieve and modify workflows

September 2015 - December 2015
- Worked on RESTful and SOAP-based web services using .NET to retrieve complex business data for internal clients
- Created Jenkins projects to deploy web services into multiple environments, reducing the deployment time from few hours to minutes

PROJECTS

ROBUST GENERATIVE LATENT DYNAMICS VIA UNCERTAINTY LEARNING | PyTorch (In Progress)
- Novel research on learning a latent dynamic model that is robust to out of distribution data, severe noise and occlusion

META LEARNING IN RL | PyTorch • OpenAI Gym
- Implemented RL^2 with PPO and combined SNAIL to meta learn RL in tabular settings

METAL DAGGER | PyTorch • OpenAI Gym
- Novel research on learning a direct mapping from behavioural cloning weights to after DAgger weights across multiple similar tasks

CACHE REPLACEMENT WITH RL | Pytorch • OpenAI Gym
- As opposed to choosing between existing policies, formulated problem as contextual multi-armed bandit and trained a cache replacement policy such that it adjusts itself when the distribution of the workflow changes

GITEDU | MongoDB • Express • React • Node.js
- A private repository built using Git binary that allows students to share their projects to employers without violating academic integrity