Christopher Leung

SOFTWARE ENGINEER · MACHINE LEARNING RESEARCHER

☐ 1 (+647) 838-2033 | ✉ christopherleung99@gmail.com | 🏠 www.christopherleung.ca | 🔧 Christopher-Leung

Skills

LANGUAGES	Python, Java, C++, Scala, C, Shell Script, SQL, VBA
DATA SCIENCE	Tensorflow, Keras, scikit-learn, pandas, SciPy, Matplotlib
DISTRIBUTED TOOLS	Storm, ElasticSearch, Flume, Hadoop, Spark

Experience

OKTA
Toronto, ON
Software Engineer (Machine Learning) - Adaptive Auth
Jun. 2019 - Present
- Responsible for Machine Learning Engineering in the Adaptive Multi Factor Authentication team.

GOOGLE
Mountain View, CA
Software Engineer Intern - Ads Integrity, Risk
Sept. 2018 - Dec. 2018
- Improved optimizer for many existing models to better detect fraudulent advertisers.
- Explored and implemented state-space search and state-of-the-art reinforcement learning algorithms from research papers.
- Designed a modular, distributed infrastructure to work with an extremely large amount of data samples.
- Collaborated with researchers across many Machine Learning fields through an internal research conference.

OKTA
Toronto, ON
Software Engineer Intern - Adaptive Auth
May 2018 - Aug. 2018
- Researched new unsupervised machine learning models for improving identity theft detection.
- Implemented algorithms from machine learning research for experimentation and production environments.
- Integrated a tracking mechanism to collect data into the production data pipeline. Collected millions of samples from users.
- Presented a proof of concept to stakeholders using data visualization and dimensionality reduction techniques.

IBM CANADA
Markham, ON
Software Developer Co-op - Master Data Management
Sept. 2016 - Apr. 2017
- Implemented a Slack bot using the Slack API to post installer statistics into team Slack channels.
- Designed, built, and maintained a data pipeline that automatically tests the product installer by using Java.
- Implemented a mutex-like API to handle concurrent file access requests between multiple servers. Designed a system to pre-empt locks based off a time quantum to account for server failures.

THE GOAL GETTERS ASSOCIATES
Toronto, ON
Associate Consultant Co-op
Jan. 2015 - April. 2015
- Created a comparison algorithm to detect inconsistency in client billing information.

Projects

HarmoMe
Main Research Project
May. 2017 - Present
- Current research endeavor and large project and inspired by the amazing work done by Google's Magenta team.
- Tackling the problem of AI music composition. Built with many popular Python deep learning libraries.

LEFTOVERS
Hackathon Project - MLH Local Hack Day 2016
Dec. 2016
- Built a web app that provides recipes from various popular websites given a list of food ingredients.
- Assisted members with learning new technologies such as HTML5, CSS, and JavaScript.

Education

UNIVERSITY OF WATERLOO
Waterloo, ON
Honours Bachelor of Computer Science
Sept. 2013 - April 2019
- Courses: Machine Learning, Artificial Intelligence, Learning Theory, Neural Networks
- UW Data Science Club Executive (2018-2019)
    - Leader for Neural Networks Workshop: Taught introductory Reinforcement Learning to over 70 people.
- Presented Okta's Machine Learning endeavors at company's Data Science event.