

# Christopher Leung

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3 Years in ML Engineering, 16 Months of Internship Experience, Graduate Student & Researcher.

## Skills

**LANGUAGES** Python, Java, C++, Scala, C, R, Shell Script, SQL, VBA

**TECHNOLOGIES** PyTorch, Tensorflow, Keras, scikit-learn, Storm, FlumeJava, Hadoop, Spark

## Work Experience

### META

Software Engineer

Toronto, ON

May 2022 - Present

### PINTEREST

Machine Learning Engineer

Toronto, ON

May 2021 - May 2022

- Working on purchase optimization for ranking and recommendations to increase the likelihood of shopping conversion.
- Built a "conversion" model, trained on hundreds of millions of samples to boost probability of user checkout after closeup. Integrated model into all real-time recommender engines in Pinterest (Homefeed, Search, Related Pins, Related Products).
- Conversion model improves checkouts for all recommenders and was the largest conversion gain for Pinterest in 2021.

### OKTA

Software Engineer (Machine Learning)

Toronto, ON

June 2019 - April 2021

- Designed and implemented a machine learning pipeline to detect cyberattacks on client organizations.
- Implemented and improved statistical and machine learning models to protect users against account takeover.

### GOOGLE

Software Engineer Intern

Mountain View, CA

Sept. 2018 - Dec. 2018

- Improved and optimized existing machine learning model to better detect malicious advertisers in Google Search.

### OKTA

Software Engineer Intern

Toronto, ON

May 2018 - Aug. 2018

- Discovered a model that can identify users through typing habits with an accuracy of over 94%.

### IBM

Software Developer Co-op

Markham, ON

Sept. 2016 - Apr. 2017

## Education

### GEORGIA INSTITUTE OF TECHNOLOGY

Master of Science in Computer Science

In Progress

- Specialization in Machine Learning - Cumulative GPA: 4.0/4.0
- Student Researcher at the Design and Intelligence Lab

### STANFORD UNIVERSITY

Professional Certificate in Artificial Intelligence

In Progress

### UNIVERSITY OF WATERLOO

(Hons) Bachelor of Computer Science

June 2019

## Research Projects

### LISTENER-REASONING SPEAKER

Short Paper

Title: Pragmatic Learning via Listener-Reasoned Utterance Augmentation.

- Invented a meta-learning technique that solves Stanford's Color Reference task with 94.5% accuracy, beating SOTA by 8%.

### COST-BALANCING CLUSTERING TREE

Long Paper

Title: Test-Cost Sensitive Methods for Identifying Nearby Points

arxiv: 2010.03962

- Solved a new problem in budget-constrained data repair with a proposed Markov Decision Process framework.
- Proposed deep reinforcement learning algorithm which outperforms random policies in the context of cost-based data repair.