

## EXPERIENCE

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### **Snap Inc**

*Senior Research Engineer*  
*Research Engineer*

*August 2021 - Present*  
*September 2019 - August 2021*

Focus around engineering Artificial Intelligence / Machine Learning systems to realize products out of Snap's research. Through contributions at the lab, have helped build solutions to train large scale graph neural networks and deduplicate news.

*Software Engineer*

*December 2018 - September 2019*

Engineered various key features for vertical video creation for Snap Publisher; some highlights include: optimizing video playback and html canvas performance, handling data management intricacies of distributed multi-tiered architecture, and introducing various new frameworks to ease development such as one for Generalized Message Passing for compute intensive webapps.

*Research Engineer*

*February 2018 - December 2018*

Maintained Research team's cloud compute tooling, used by 100s of ML projects to scale up experiments; tangentially engineering tooling to improve cost efficiency and cost reporting for the system. Helped engineer foundations of multi-year research projects, including Snapchat Trends - a subset of which, eventually became an external facing product 3 years later.

*Software Engineer Intern*

*Jan 2017 - April. 2017*

Designed a library for on-device offline keyword detection, which was later used as technology backing various speech recognition lenses.

### **Amazon Inc**

*Software Development Engineer Intern*

*May 2016 - August 2016*

Developed software to automate localization for the Amazon Silk browser, saving roughly 1+ hour/week of manual engineering effort.

### **IBM**

*Mobile Solutions Developer*

*September 2015 - December 2015*

Consulted for one of the top 5 financial institutions in Canada, engineering and presenting business and technical solutions centred around client authentication to C-level executives. Worked with cross-company and crossorganizational teams to design and engineer POC for new authentication architecture.

### **Microsoft**

*Xbox Marketing Assistant*

*January 2014 - April 2014*

Constructed analytical reports for games portfolio; automating parts of the process by creating tools in VBA (Excel) to compute viability of rebate programs by leveraging plethora of available signals (both internally and externally) - derived insights were used for sales and inventory forecasting. Designed and led a successful contextual digital marketing campaign for the Canadian market, leveraging popular video game influencers, to drive demand generation for launch of a new AAA game.

## EDUCATION

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### **University of Waterloo**

*Bachelors in Computer Science*

Waterloo, ON

*December. 2019*

### **Wilfrid Laurier University**

*Bachelors in Business Administration*

Waterloo, ON

*December. 2019*

## SKILLS SUMMARY

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**Languages:** Python, Java, Javascript, Objective-C, HTML, CSS

**We/Mobile:** React, Redux, Node, Express, iOS

**Tools:** Bazel, Pytorch, Kubeflow, Monorepositories, Big Data, SQL, Machine Learning

**Platforms:** GCP, AWS

## OTHER EXPERIENCE

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### **Restuaraunt Inventory Management Software**

*Owner*

Self Employed

*September 2016 - August 2017*

Led a group of two other developers in engineering an inventory management software solution for small to medium sized restuaraunts.

### **South African Embrace Foundation**

*Web Content Developer*

*December 2015 - December 2016*