

# Aditya Arora

Software Engineer // Data Scientist

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## EXPERIENCE

### Software Engineer - Cost Recommendations

July 2022 - Present

- Mitigated 10+ team wide production incidents, and drove postmortem efforts that led to 10% improvement in data pipeline reliability and runtime
- Owned and expanded [CUD recommendations](#) offering to non-USD customers that led to potential annualized customer savings over \$XXXM, while mindful of customers' negotiated contracts with large scale Java map-reduce pipeline processing 1 trillion line items daily
- Built single pane of glass view of team operational health dashboard including 80+ metrics on SLO/SLA, performance, reliability and production incidents
- Organized, directed and tracked team progress as scrum leader for infrastructure data pipelines, driving daily standups, biweekly syncs, demos and retrospectives

Google

Kitchener, ON

### ML Engineering Intern

Sep 2021 - Dec 2021

- Built a k8s service to predict the lifetime value of ~200M users on a daily basis to be used for return on ad-spend prediction, financial forecasting and A/B test analysis for better user targeting
- Onboarded and supported 1 new intern, and 3 full time data scientists and engineers to the team
- Setup core ETL infrastructure to enable Spark/Airflow to work with new in-house data lake

Wish

Toronto, ON (Remote)

### Software Engineer - Research Assistant

May 2021 - Aug 2021

- Built an internal platform under Prof. Derek Wright using Postgres, Node and React for managing the ECE departments' CEAB requirements

University of Waterloo

Waterloo, ON

### Data Scientist Intern - Consumer Data

Jan 2021 - Apr 2021

- Built a 94% accurate model to predict the probability of the user refunding an item within 90 days
- Reduced refund abuse by developing a single scoring mechanism for each user to accurately reflect the abuse by them and their linked accounts against Wish refund policies
- Improved revenue by using XGBoost to conduct explainable user segmentation to isolate clusters of users that purchase up to 10x more from user generated content

Wish

Toronto, ON (Remote)

### Software Engineering Intern - Payments

May 2020 - Sep 2020

- Improved transaction success by 3% for an annualized improvement in GMV by \$15M by setting up remove item retry mechanism for insufficient fund transactions
- Increased average customer satisfaction by 3% by designing and developing a user flow to allow users to change their payment method after placing an order

Wish

Waterloo, ON (Remote)

### Software Engineering Intern

Sep 2019 - Dec 2019

- Increased customer food satisfaction by 40% by devising a statistical model based on customer reviews to isolate performance driving metrics for weekly menu design using Pandas/SciPy
- Built 70+ top level dashboards with over 60 internal KPIs in Metabase to simplify metrics

KitchenMate

Toronto, ON

### Data Engineering Intern - Bid Efficiency

Jan 2019 - Apr 2019

- Reduced customer conversion time by 15% by building a tool using Python, BigQuery and Google Sheets API to entice new customers
- Improved bid accuracy by 30% by analyzing the performance of core algorithm in Tableau

DraperAI / Perpetua

Waterloo, ON

### Data Scientist - Research Assistant

Sep 2018 - Dec 2018

- Researched into NLP models in Python and Dialogflow for Loblaw's under Prof. Fakhri Karray to allow customers to ask contextual questions while in store

CPAMI, University of Waterloo

Waterloo, ON

## SKILLS

### Languages

Python, Java, Javascript, C/C++, Rust, Matlab

### Data Science

XGboost, Spark/Hadoop, Pandas, Sklearn, Tensorflow, Keras, Tableau, PostgresQL, BigQuery, MongoDB, Elasticsearch, Airflow

### Full Stack

React/Redux, NodeJS, AngularJS, Typescript, Django, Flask, Pytest, SASS, Mocha/Chai

### DevOps

Docker, Kubernetes, deployed on Google Cloud Platform (GCP) and Amazon Web Services (AWS)

## EDUCATION

### University of Waterloo

BASc Dean's Honor list in Computer Engineering, Option in Artificial Intelligence, June 2022 with perfect scores in Reinforcement learning, Cooperative and Adaptive algorithms and Discrete Mathematics I and II

### President's Research Award x2

For excellent academic performance coupled with research outside of course requirement

## PROJECTS

### LeapMetry

devpost

Designed an ASL to speech converter using Leap Motion, computer vision and Azure Text to Speech API and won the CANSOFCOM Data Challenge at Hack The North 2019

### WaterlooWorksV2.0

github

Improves job search and filtering for students at UW, modernizing the user interface of the official job search platform using ReactJS, Node.js, MongoDB and Elasticsearch

### Ray Tracer

github

Wrote a ray tracer in Rust with motion blur, anti-aliasing, positionable cameras, and textures - image and surface

### RTChess

rtchess.ml

Serverless chess and chat using WebRTC

### ScrambledGQ

scrambled.gq

Serverless blog that uses LZMA compression to encode the entire webpage content into the URL itself [demo](#)