

Aditya Arora

Software Engineer // Data Scientist

arora-aditya.com
+1 (226) 899 1327

linkedin.com/in/arora-aditya
github.com/arora-aditya
aditya.arora@uwaterloo.ca

EXPERIENCE

Incoming Software Engineer
Starting Aug 2022

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

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

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 upto 10x more from user generated content

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
- Enhanced traceability of fraudulent actors by marking user sessions with a multi-factor authentication session key to log high risk events
- 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

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

Data Engineering Intern
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
- Found and fixed three high priority Django API bugs affecting 10% of our marquee customers

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

Data Scientist/Full Stack Developer Intern
Apr 2018 - Sep 2018

- Wrote complete CRUD web apps and REST APIs from scratch with less than 0.1% downtime to serve data to multiple internal applications to serve LCBO's customers
- Refactored, containerised using Docker and deployed to Kubernetes a grocery store management Ruby on Rails web app for LCBO's corporate customers including Loblaw's and Sobeys

Google
Kitchener, ON

Wish
Toronto, ON (Remote)

University of Waterloo
Waterloo, ON

Wish
San Francisco, CA (Remote)

Wish
San Francisco, CA (Remote)

KitchenMate
Toronto, ON

DraperAI / Perpetua
Waterloo, ON

CPAMI, University of Waterloo
Waterloo, ON

LCBO|next
Kitchener, ON

SKILLS

Languages

Python, Javascript, C/C++, Rust, Java, 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 in Computer Engineering, Option in Artificial Intelligence, Exp. grad. June 2022 with perfect scores in Reinforcement learning, Cooperative and Adaptive algorithms and Discrete Mathematics I and II

Term Dean's Honors List x4

For excellent academic performance in Fall 2020, Fall 2018, Winter 2018 and Fall 2017

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](#)