

# Adi Sharma

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## CONTACT

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asharma.me

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## SKILLS

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**Languages:** Python, C, C++, Go, Java, Javascript, VHDL, RISC-V  
**ML/Data/Infra:** Pytorch, Tensorflow, Spark, AWS, Cassandra, Kubernetes, GCP, fastai, Pandas

**Web/Mobile:** React, GraphQL, DynamoDB, HTML/CSS, NodeJS, Android Studio, Next.js

## EDUCATION

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**University of Waterloo** 2016 to Current

BASc Computer Engineering  
Involvements : (VP Education) UW Coffee 'N Code, UW Data Science Club

Courses : Digital Hardware Systems, Compilers, Systems Programming & Concurrency, Data Structures & Algorithms  
GPA: 4.0/4.0 (3A)

## AWARDS

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**HackMIT Winner**  
2019

Won 1st Place out of 250+ team  
Additionally, won our track (category) award

**EngHack 2019 Winner**  
2019

Won Best Domain Hack out of 50+ teams

**Waterloo Engineering Competition**  
2017

Won 1st place in Consulting track

**Loran Scholar**  
2016

One of 31 scholars selected out of over 4300+ students across Canada on the merits of character, leadership and service

## EMPLOYMENT

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**Pareto**

Software Developer

Apr. 2020 to Current

- **Designing and developing** the tech infrastructure <https://www.hellopareto.com> to handle tasks from over **250 clients** worth **\$8K monthly** from scratch
- Revamped the operational workflow using Hasura and Retool to save an avg. **15 hours** for a team of **5** every day

**Plastic Havas**

Machine Learning Intern

Spring 2019

- Implemented **YOLO** (Object Detection)/**OCR** algorithms and integrated them in an **Android** app created from scratch to interface with the Loomo Segway(Segway Robotics) to simulate autonomous driving for coffee-delivery
- Used **StyleGAN** for fake persona generation, **CNN + RNN** for image caption-generation, and **Open-GPT2** for comment generation to simulate a fake Instagram "influencer", getting to a max of 100 followers
- Automated most Instagram interaction features using web scraping, Selenium, and Instagram API and created a **Django** based Web-App for the marketing team to use the above tool for their marketing workflow

**IBM**

Cognitive Software Developer

Fall 2018

- Performed numerous data wrangling operations and exploratory data analysis using **Tensorflow**, **pandas**, and **scikit-learn** on 500 GB of unstructured sensor data from various data sources to help build a pump failure prediction model
- Implemented multithreading and multiprocessing to make data ingestion pipeline **30** times faster and more robust than previous state
- Developed various low latency data ingestion services in **Golang** to interact with **Cassandra** and **Consul**

**Citco Fund Services**

Software Engineering Intern

Winter 2018

- Designed and developed an end-to-end web application that monitors health of various APIs, and services and records the results, alerting the service owner in case of malfunction using JavaEE, Spring MVC, Hibernate, SQLServer, Maven and Tomcat reducing average service downtime by **3 days**
- Designed, developed and shipped a **RESTful** backend API from scratch based on business requirements using object oriented design to be consumed by various third-party clients using **C#** and **Entity** framework

**Shaw Communications**

Software Engineering Intern

Winter 2017

- Used **Tableau** to visualize and analyze customer base in Calgary and recommend strategies for customer acquisition and growth
- Decreased double AA accessibility issues on the entire platform by **48%** across the entirety of Shaw's main online platform and hence saving about **\$15,000** in fines

**Tiny Factories**

Indie Maker

Winter 2020

- Shipped numerous projects as part of Tiny Factories(tinyfactories.space); a selected few highlighted below
- **moshimoshi.glitch.me**: An anonymous chat platform on which there is a new conversation topic every 24 hours with **200 DAU** three days after launch (Tachyon, NodeJS, Express, socket.io)
- **CSV-to-image**: A utility tool that takes in CSV of images and stylizes it based on user input and generates images of different formats/sizes (NodeJS, Express, Stripe integration, Firebase)

## PROJECTS

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LabelLearn (Hackathon Winner)

- Ideated, and architected a data labeling tool that enables a labeler to be consistent with both their fellow labelers and their past self while seeing the live class distribution of the dataset
- Created a UI allowing a user to annotate data points while seeing the distribution of labels the particular data point has been previously assigned by another annotator using **MEAN** stack and Canvas.js
- Set up the **Firebase** infrastructure to interact with the UI to provide recommendations on incoming labels to help users with their decisions
- Won **1st place** at **HackMIT** out of more than 250 projects while also winning in our category of **Dev-Tools** challenge

Six Feet Away (Incubated.)

Current

- Developed a social networking site that lets you see what user's friends are up to and their activities for the day and allows them to join each other to foster more spontaneous communication as part of **Contrary VC's Homework Program** and got to **50 DAU**
- Used **NodeJS**, **DynamoDB** with Express Server on the backend and **React with Typescript** on the frontend with socket.io
- Set up the core infrastructure on AWS using **EC2**, **Load Balancer** and Redis