

ADITYA SHARMA

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➤ Skills

LANGUAGES: Python, C/C++, SQL, Go, Java, C#, VHDL, RISC-V, Javascript
TOOLS: Pytorch, Tensorflow, Keras, Pandas, Cassandra, Kubernetes, GCP, scikit-learn, Spark, Android Studio

➤ Employment

Plastic Havas

Machine Learning Intern

Spring 19

- 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"
- Automated most Instagram interaction features 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 18

- 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 18

- 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 17

- 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

➤ Selected Projects

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 **Firestore** 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 about 210 projects while also winning in our category of **Dev-Tools** challenge

Sundae (Hackathon Winner)

- Ideated, designed, and architected an app a text-based journaling chatbot that uses **NLP** and **sentimental analysis** to help with your mental health using **MEAN stack** and **Twilio**
- Used **data visualization** and clustering to **show users trends** in their mood and particular times/days that they are most vulnerable at

MyoVision (Hackathon Winner)

- Designed, develop a system that plans workouts and tracks the number of a certain exercise performed by an individual over a given frame of time using the **Myo armband** and **C++**
- Analyzed the data gathered via the various sensors to perform **relevant statistics** over the quality of respective exercise and provide recommendations on improvement of posture and form

➤ Education

University of Waterloo

Sept. 16 to Present

BASc Computer Engineering

Involvements : VP Education - UW Coffee 'N Code, UW Data Science Club, UW Badminton Club

Courses : Systems Programming & Concurrency, Data Structures & Algorithms, Embedded Systems, Fast.ai - Deep Learning