# **ALLEN(ZEYU) ZHANG**

a zz3904@nyu.edu 917-293-8850

@ GltHub | Linkedin | Portfolio

New York, United States

#### **EXPERIENCE**

#### Full-Stack Developer

#### Mozzaz

12/2018 - 09/2020 | Toronto, ON | Link | Javascript, Azure, Docker, Node.js

- Architected and built video call & chat microservices for the Mozzaz Care app that has been used by more than 5 corporation customers including one of the largest pharmacy, CVS
- Refactored Mozzaz Talk app's code that makes it compatible to legacy browsers like IE9 & 10 and improved page time by 24%

#### Softwware Developer

#### **luvo Ridesharing**

04/2019 - 08/2017 | Toronto, ON | Link | Docker, K8s, MongoDB, Typescript

- Used Docker & Kubernetes to build 3 microservices including payment, order, and authentication
- Built a NATS Streaming server as a message broker that enabled fast asynchronous communication among microservices

## Co-Founder & Software Developer

03/2017 - 08/2017 | Toronto, ON | Link | MySQL, .NET, HTML, CSS

- Cofounded a startup company that helped hundreds of new international students to settle in the new environment
- Built and deployed both frontend & backend of a website that provided various services including airport pickup & city tour

#### **RESEARCH**

## EEG-based Emotion Recognition (2020-2021)

#### **Western University**

- Completed a thesis paper on emotion recognition using EEG dataset and hybrid neural networks
- Applied Channel-wise Attention & Self Attention mechanism with a convolutional Recurrent Neural Network for classifying emotions and achieved accuracy of 84%

#### **PROJECTS**

#### Landmark Recognition (2020)

Google Play Store | React Native, Node.js, Express.js, Tensorflow, Python, GCP

- Built and Published a landmark recognition mobile app on Google Play Store with 1,000+ downloads in a month
- Used transfer learning to train a EfficientNet model for landmark recognition with accuracy of 82%

#### ML Trading (2020)

GitHubGithub | Bash, Tensorflow, Python, GCP, SQLite, Sklearn

- Built trading automation microservices that trade 4 cryptocurrencies and achieve 12% monthly gains
- Developed 4 trading strategies using machine learning models including Random Forest for Mean Reverting & Trend following, word embeddings for SEC filings & financial news and CNNs for satellite images
- Migrated trading APIs from REST to gRPC, which reduced latency for receiving data by 5 times

#### **EDUCATION**

## Computer Engineering

#### **New York University**

## **Computer Science**

**WESTERN UNIVERSITY** 

#### **LANGUAGES**

Python, Javascript, Typescript

C, C++, Java

## **TECHNOLOGY & TOOLS**

Tensorfl	ow s	Sklearn	PyTorc	h
SQL	Postgre	SQL	MongoDB	Git
ReactJS	Noc	le.js	Docker	Linux
Kubernetes Jenkins			Kafka	Bash
Gradle	GCP	Azu	re UML	

#### **HACKATHONS**

#### **Nwhacks**

Worked in a 4-person team for 36 hours to build a mobile app for finding parking spots

#### **EthWaterloo**

Build a fraud-prevention app using facerecogition & Blackchain. Pitched final project in front of a judge of established blockchain founders

#### **CERTIFICATION**

Coursera - DeepLearning.Al
Deep Learning Specialization

#### edx - Harvard CS50

Mobile App Development with React Native

## **PROJECTS**

## Sentiment analysis NPM package (2021)

Github | Tensorflow, Python, Typescript, Node.js

- Programmed and published a node.js library for sentiment analysis and extraction with 50+ downloads
- Developed 5 Deep learning models for various sentiment analysis tasks including GRU model for news-stock sentiment prediction, RoBERTa model for sentiment extraction and word embeddings for financial documents that achieved accuracy of 80%+

#### luvoShare (2019)

Google Play Store | React Native, Node.js, Ethereum, Javascript, Python, GCP

- Built and published a content-sharing mobile app on Google Play Store with 100+ downloads
- Built a private blockchain network with 3 nodes deployed on GCP Compute Engine and implemented Proof of Stake consensus mechanisms that achieve 200 transactions/s