ALLEN(ZEYU) ZHANG

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🔗 GIthub | Linkedin | Portfolio

📍 London, Ontario, Canada

EXPERIENCE

Software Developer (freelancer)
12/2018 - 09/2020 | **Python, Tensorflow, GCP, Docker, Jenkins, Kubernetes**
- Built an AI chatbot with **Dialogflow & Firebase,** which supports **2 languages** and used by more than **40 students**
- Developed a fully-orchestrated **CI/CD pipeline** using **Jenkins** and **Kubernetes** with self-healing and autoscaling functionalities
- Trained a machine learning model using **word embedding** to capture Tweet sentiment related to stock market in real time and achieved accuracy of **71%**

Co-Founder & Software Developer
VpickU Inc
05/2017 - 09/2018 | Toronto, ON | **Python, AWS, Kafka, PostgreSQL, Node.js**
- Led a team of **3** developers to build a blockchain ride sharing app and successfully raised **$25,000** from an angel investor
- Built a real-time GPS tracking program with latency of **5 ms** using **Kafka**
- Wrote **REST APIs** with **Node.js** and **PostgreSQL** and hosted them on **AWS EC2**

RESEARCH

EEG-based Emotion Recognition (ongoing thesis)
Western University
- Completing a research paper on Emotion Recognition using DEAP dataset and **CRNN** model under supervision of Dr. Boyu Wang
- Experimented with **a hybrid neural network** that combines **CNN & LSTM models** for emotion classification and reached accuracy rate of **93%**

PROJECTS

Landmark Recognition (2020)
Github | React Native, Node.js, Express.js, Javascript, Tensorflow, Python, GCP
- Built and Published a landmark recognition mobile app on Google Play Store with more than **1,000+ downloads** in a month
- Trained a **EfficientNet model** for landmark recognition with accuracy of **82%**

ML Trading (2020)
Github | Bash, Tensorflow, Python, GCP, SQLite, Sklearn
- Built a trading program using **4 Random Forest models** to automatically trade 4 cryptocurrencies and achieved **15% monthly gains**
- Programmed **a multiprocessing framework** to train up to **4 Random Forest models** in parallel, which reduced model training time by **30%**
- Built a **real-time** data preprocessing pipeline to convert time series data to information-driven data, and stored processed data in **SQLite** database

Kaggle ML Competition (2020)
Github | Tensorflow, PyTorch, Python
- Built a ML model with **XGBRegressor** to predict COVID19 cases for COVID19 Global Forecasting (Week 4) competition and ranked top **30%**
- Implemented a pre-trained **roBERTa model** with Jaccard score of **0.7** to capture sentiment in a language for Tweet Sentiment Extraction Competition

IuvoShare (2019)
Google Play Store | React Native, Node.js, Express.js, Javascript, Python, GCP
- Built and published a mobile app on Google play store with **100+ downloads**
- Developed a distributed network using **Merkle Patricia Trie**, **PoS consensus** mechanism and achieved transaction speed **30% faster** than Bitcoin network

LANGUAGES

Python, Javascript

C, C++, Java

TECHNOLOGY & TOOLS

Tensorflow	Sklearn	PyTorch	
SQL	PostgreSQL	MongoDB	Git
ReactJS	Node.js	Docker	Linux
Kubernetes	Jenkins	Kafka	Bash
Gradle	GCP	IBM Cloud	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 system based on biometrics. Pitched final project in front of a judge of established blockchain founders

EDUCATION

Computer Science
WESTERN UNIVERSITY
📅 09/2016 - Ongoing
📍 LONDON, ON
- Entrance Scholarship

GPA
3.7 / 4.0

CERTIFICATION

Coursera - DeepLearning.AI
Deep Learning Specialization

edX - IBM
Developing Cloud Native Applications
Developing Cloud App with Node.js and React

edx - Harvard CS50
Mobile App Development with React Native