Zhengxu Wang

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Portfolio: https://zhengxu.pages.dev/

EDUCATION

Boston University, *Master of Computer Science* (GPA 3.71)	Boston, U.S.	*Sep 2022 - Jan 2024*
Beijing University of Technology, *Bachelor of Computer Science and Technology*	Beijing, China	*Sep 2017 - Jul 2021*

SKILLS

Languages: (BackEnd) **Python, Java, C++;**   (FrontEnd) **JavaScript, TypeScript, SwiftUI;**   (Other) **SQL, Bash**
Frameworks: (Dev) **React, Node.js, Flask, QT;** (AI) **PyTorch, TensorFlow;** (Deploy) **Spring Boot, Nginx, Docker, Kubernetes, Redis, ElasticSearch;** (Cloud) **AWS, Azure;** (DB) **MySql, OracleDB, SqlServer, Neo4J;** (Tool) **PowerBI/Automate**

WORK EXPERIENCES

Software Engineer Intern (Co-founder)   SwiftUI, AWS EKS, Xcode, Git   *May 2023 – Present*
SocialTech Labs Inc.   New York, NY
*App Store: **BestFriendsNetwork** -- An app about friendships*
- Using **SwiftUI** created Front-end new features including drawing and send to friends, save messages as dairy, and a calendar view of emotional dairy etc.
- Writing Back-end **Restful APIs** using **Golang** and deploy it as **docker** image in **AWS EKS**, also used **Redis**, **DynamoDB**, **S3**, **EC2.**

Software Engineer Intern (Automation)   PowerAutomate, PowerBI, Bash   *May 2023 – Aug 2023*
Dell Technologies Inc.   Global Translation Team--EMC
Optimize manual work into an automatic workflow
- Using **PowerBI** connect to **SqlServer** to fetch data and create a data monitoring report. Set data error alert and auto-trigger the **PowerAutomate** flow to notify PMs and create MS List items. Issues finding speed from one week to one day.
- Create **PowerAutomate** desktop flow help PMs auto batch update TMS platform jobs' information by filling Excel template.
- Learned **APEX** cloud platform and **VxRail**.

Software Engineer Intern   React-Native, AWS, JavaScript, Python, Flask, Git   *Jan 2023 – Aug 2023*
BU Spark & UmpScores   Boston, MA
*Website: **UmpScores**   Provided accurate game performance measurements of baseball games.*
- Front-end: **React**-Native (**JavaScript**). Optimize thousands of lines hard-code, fix data ranking screen, and adds new ranking and filter functions.
- Back-end: **Flask** (Python) deployed in **EC2** with **CI/CD**, data stored in **AWS**-Dynamo&S3. Optimize APIs data processing and create new APIs.

Software Engineer Full-time   Java, JS, Docker, ElasticSearch, Neo4J**,** SpringBoot, Nginx   *Jul 2021 – Aug 2022*
Atos Information Technology Co. Ltd   *Company Website*
*Developed an interactive visual **Knowledge Graph** based on document metadata and content in the Enterprise Content Management platform, deploy as **micro-services**.*
- Back-end: **SpringBoot** (**Nginx**) starts the **Neo4j** and **MySql** databases, starts the **Java RestfulAPI** and data synchronization scripts, use **Docker** to deploy. Using **Junit** to do unit test.
- Front-end: **Vue.JS** implement multi-level click expansion of nodes in the graph and preview page jumping by click on node.
- Optimized the **ElasticSearch** micro-service, delivering search and recommendation function and implementing distributed deployment. Used **Redis** to accelerate high concurrency search speed under 2s.

Research Assistant   Python, PyTorch, CV   *Nov 2020 – Jul 2021*
Chinese Academy of Sciences   *Published Paper: **China Digital Medicine***
MRI Brain Image Segmentation Assist Alzheimer's Diagnosis
- Added **Self-Attention** and Generalized-Dice Loss to **PyTorch**-based **3D-Unet** model to segment the Hippocampus region and automatically quantify and visualize Hippocampal atrophy. The dice coefficient of the segmentation result exceeds 0.9.

NLP AI Intern   Python, TensorFlow, PyTorch, NLP   *Jul 2020 – Nov 2020*
Asia-Info Data Co. Ltd   *Company Website*
- Built **Python Web-Crawler** to get medicine instructions as a training corpus, build the **Tensorflow(Keras)**-based **CNN** and **RNN** models to train classification model mean-AP reached 96%.
- **ChatBot** using GRU+Seq2Seq implements PubMed QA data to realize medical advice chatbot. *Project Paper*
- Using Neo4j as graph DB, and a **BERT**-based NER model to extract triplet from the dataset (same as chatbot training data) creates KG to evaluate the chatbot's performance.