

Guanyu Zhang

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WORK EXPERIENCE

Alipay

Software Engineer

Sunnyvale, CA

Jan 2023 – present

- Designed and developed an API for the digital wallet application in compliance with the requirements of the *Amazon* Payment Service Provider Program, allowing *Amazon* to access merchants' detailed information. Reduced API response time from 130ms to ~60ms by leveraging *Asynchronous Messaging* for database operations
- Integrated *Alipay* into *Shopify* as a payment provider, enabling merchants to accept payments via both digital wallets and cards. Leveraged the capabilities of internal software platforms and middlewares such as *message queue*, *MySQL*, *SQL sharding*, *distributed transaction systems* and *Redis*
- Led a team of 4 colleagues to integrate *Venmo* as a payment option for US buyers on *AliExpress*, aimed at attracting a younger customer demographic. Utilized *distributed resource management* for dynamic configuration changes
- Implemented the receiving account feature in a digital wallet application with *Java Spring Boot* and *Object-oriented programming*, enabling users to transfer funds globally with zero fees across 15 countries and regions
- Leveraged *RAG* and *LoRA fine-tuning* on the *Qwen2-7B-Instruct* base model to develop an *AI agent* capable of generating E2E test case descriptions for code revisions from diverse file formats and plain text inputs. These descriptions were then fed into the company's internal Copilot, which automatically generated the corresponding E2E test code snippets
- Set up a CI/CD pipeline for the UI of a digital wallet application, primarily using *CommonJS* with *UIRecorder* framework

Qingdao Anzhi Capital Management

Software Engineer Internship

Shanghai, China

Oct 2020 – Jan 2021

- Collaborated with supervisor to build and maintain databases for daily transaction data using *MySQL* and *MongoDB*
- Built models based on volatility to estimate the trend of stock index futures, visualized the data using *Python* and updated the webpage on a daily basis. The data served as an indicator for the strategy developers

PROJECTS

AWS cloud native application

Oct 2021 – Dec 2021

- Collaboratively designed and developed a web application on *AWS* using *Agile* methodologies within a team of four. Leveraged services and tech stacks including *Amplify*, *EC2*, *Elastic Beanstalk*, *S3*, *lambda function*, *Relational Database Service*, *Next.js* and *Python*

Improving annotation reliability of real-world collected speech data

Nov 2020 – Dec 2020

- Focused on the speech data collected from commercial sensors, applied feature extraction skills including *MFCC* and *pre-trained neural networks* to develop a pipeline to transform raw speech data into formatted two dimensional input
- Created a classifier based on the *VGG-S* net to label the speech instances of uncertain speakers by thresholding the output confidence values of the model. The model improved the F1 score by ~5% compared to the benchmark RF model

EDUCATION

Columbia University

M.S. in Computer Science, Machine Learning Track

New York, NY

Dec 2022

- Job: Course Assistant for COMS 6156 Cloud Computing

The University of Texas at Austin

B.S. in Mathematics

Austin, TX

Aug 2021

- Honors: College Scholars

TECHNICAL SKILLS

- Tech Stacks:** Python, Go, Java, JavaScript, HTML5/CSS, SQL, EC2, Amplify, CloudFront, API Gateway, RDS, Elastic Beanstalk, S3, MySQL, MongoDB, Google BigQuery, Redis, PyTorch, scikit-learn, Transformers
- Computer software:** Github, \LaTeX , Visual Studio Code, Next.js, jQuery, Docker, Kubernetes with Minikube, PySpark with Dataproc