

YUYANG WANG

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EDUCATION

Cornell University <i>MEng in Computer Science (GPA: N/A, Awarded Cornell Merit-based Scholarship)</i>	Aug 2023 - May 2024 New York, USA
University College Dublin <i>BS in Software Engineering (GPA: 4.01 / 4.20, Ranking: 2/89)</i>	Aug 2019 - June 2023 Dublin, Ireland
Beijing University of Technology (Dual Degree with University College Dublin) <i>BEng in Software Engineering (GPA: 3.92 / 4.20, Awarded China National Scholarship)</i>	Aug 2019 - June 2023 Beijing, China

EXPERIENCE

Zondy Cyber Inc. <i>Software Engineer Intern</i> Implemented an API server utilizing Django and Docker. Then deployed this project using docker compose YAML configuration on AWS EC2. Configured Grafana, Prometheus and Graylog for data/log export and monitoring.	Jun 2022 – Sep 2022 Beijing, China
Lenovo Inc. <i>Software Engineer Intern</i> Assisted the team to develop an audio based automobile engine malfunction detection model using PyTorch and deployed this inference model utilizing Ray framework. Utilized JMeter to compute Requests Per Second (RPS).	Jun 2021 – Aug 2021 Beijing, China

PROJECTS

Offer Master Web app , GitHub - A web app to help users who aim to apply to overseas universities deployed on Amazon Web Services (AWS). - Utilized SpringBoot as the backend with ORM framework Spring Data JPA to sync data models with database. - Application data were stored by MySQL, static resources were stored by using OSS. To improve the performance of loading, we utilized Cloudflare CDN and Cloudflare Zero Trust to protect our service. - Implemented Collaborative Filtering (CF) algorithm on Hadoop cluster to match applicant and school. - Utilized JSON to interface with the backend and the Web Components API to render programs and schools. - Utilized MySQL as the database server and Redis as the caching server to improve peak performance. - Utilized Github Actions as the CI/CD pipeline to achieve automatic test, build and packaging (saved 40% time). - Utilized YAML docker compose configuration file to deploy and utilized Nginx as the reverse proxy gateway.	Jan 2023 – Jun 2023
MusicMo – Online Instrument Shop Web app , Report , GitHub - Developed a e-Commerce CRUD web app for selling instrument. - Utilized Django framework and Django REST framework to implement the application. - Utilized RASA framework to implement a conversational AI customer service based on Natural Language Understanding (NLU) and Intent Classification, instrument image recognition and retrieval based on ResNet-18. - Utilized three.js to provide essential functions for online shopping and uniquely allowed customers to preview 3D instruments and interact with 3D models to customize their preferred instruments. - Packed this application to Docker image and deployed to AWS ECS by using docker-compose. - Designed a Jenkins pipeline to perform automated testing and image packaging.	Jan 2022 – Jun 2022
echo's Authorization Center Web app OAuth 2.0/LDAP based multi-IdP authorization center acting as an infrastructure for my personal projects and services. - Deployed project to AWS EC2 using Docker and protected this service using Cloudflare CDN. Page load time < 1s.	Aug 2022 – present
Android Applications - Colorize it! Github , Apk - An Android application for restoring the color of the old gray-scale images. - The functionality of image recolor was achieved by A GAN model. The model was deployed on Baidu Cloud Computing Platform, using REST API for communication. - Utilized the MVVM model while designing this application - Utilized Git to control the version of the source code. - Currently distributed by Google Play. Until now, it has been downloaded more than 1000+ times and more than 3000+ images have been recolored.	Sep 2021 – Dec 2021
Development of BM25-based Information Retrieval Algorithm Github , Apk - Designed and implemented a complete BM25-based search engine, including stopword removal, stemming and indexing. - Evaluated the algorithm using Precision, Recall, F1, P@10, R-precision, MAP, b-pref and NDCG. - Designed a modern keyword-based search pipeline utilizing Optical Character Recognition (OCR), Query expansion with automatically derived thesaurus, BM25/TF-IDF, SBERT, SlideFuse Fusion, and Learn to Rank (LTR) for re-ranking.	Feb. 2021 - Aug. 2022