Yang Qi

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EDUCATION

University of Utah - Salt Lake City, UT

Aug. 2021 - May 2023

Master of Software Engineering

• Relevant Coursework: Data Structure & Algorithms, Operating System, Computer Architecture, Database

University of Electronic Science and Technology - Chengdu, China

Sept. 2010 - June 2014

Bachelor of Mechanical Engineering

SKILLS

- **Programming Languages:** Python, Java, C++, Kotlin, Javascript/HTML/CSS
- Frameworks and Toolkits: Django, React, Docker, REST API, MySQL, Redis, Hbase, Memcached, AWS, Android, Git, Poetry, Linux, agile

PROFESSIONAL EXPERIENCE

University of Utah - 3D Lab Assistant; Salt Lake City, UT

Apr. 2022 - Present

- Worked with a team of 4 to utilize **Jira REST API** to automate a 3D printing lab based on **Flask** framework.
- Implemented features including online submitting, auto printing; resulted in reducing printing time by 40%.

Enveda Biosciences - Software Engineer Intern; Salt Lake City, UT

May 2022 - Aug. 2022

- Automated ETL with CI/CD practices to process multiple data streams to nominate high-confidence therapeutic hypotheses and target candidates using AWS Lambda, Docker, Amazon CloudWatch, ECR, S3, and Athena; pipelines resulted in increasing efficiency of the core data workflows by >50%.
- Developed a web application to interact with the ML model in **Sagemaker** using **Python**, **Streamlit**, **Rdkit**, and **Poetry**; this application deployed on **AWS EC2** was utilized by >200 internal users and external clients.

WPG Smart Water Public - Project Manager; Shanghai, China

Dec. 2015 - Dec. 2017

- Won a bid worth 1.5 million for developing a smart water supply management platform.
- Managed 6 stakeholders (engineering and product teams) to improve the efficiency of software delivery by 40% and reduce the development cost by 43% using **Agile** development.

PROJECTS

Full Stack Web Development - *Microblogging(In-Progress)*

- Applied combination of HTML/CSS, JavaScript, React on client side designing responsive layout web page; implemented features including tweets, tweets photos, likes, and comments.
- Built up **RESTFUL API** on web server side with **Django** and MVT pattern for user authentication, tweets, friendships, newsfeeds(**push model**) and relevant information data in relational database **MySQL**.
- Applied Redis, Memcached to reduce direct reads and writes to DB and Key-value store HBase to split DB queries for tables with less reads and lot writes.
- Implemented **denormalization** to store the number of comments and likes to reduce DB queries; employed **Message Queue** to deliver asynchronous tasks to reduce response time.

Mobile App Development

- Collaborated with a team of 3 to develop a health track app using **Android**, **Kotlin**.
- Implement features including user authentication, near hikes on map, weather, and step counts with gesture.
- Utilized the AWS S3 to back up the Sqlite data to reduce the errors of logging in on the local machine.

Language Interpreter

- Created a language interpreter in C++ and thoroughly tested using **Unit Test**.
- Implemented features including parsing, arithmetic/logical operations, variable comparison, and function execution; it can be used as a command line app or incorporated as a library.