

# Yang Qi

Salt Lake City | 8016049572 | [yangqi.cs2022@gmail.com](mailto:yangqi.cs2022@gmail.com) | <https://yangqiportfolio.com/>

## EDUCATION

### University of Utah

Master of Computer Software Engineering

Salt Lake City, UT

Aug. 2021 - May 2023

### University of Electronic Science and Technology

CHINA

Bachelor of Mechanical Design, Manufacturing and Automation

Sept. 2010 - June 2014

## WORK 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 build apps and scripts based on **Flask** framework to automate a 3D printing lab, including submitting, printing, and auto payment systems, resulting in running the lab from regular hours to 24/7 efficiently.

### Enveda Biosciences

Software Engineer Intern

Salt Lake City, UT

May 2022 - Aug. 2022

- Built **ETL** pipelines with **CI/CD** practices to process multiple data streams to nominate high-confidence therapeutic hypotheses and target candidates using **AWS Lambda**, **Amazon CloudWatch**, **Dockerizing**, **ECR**, **S3**, and **Athena**; pipelines resulted in increasing processing efficiency by >50% in core workflows.
- Developed a new web application to interact with the knowledge gained from Enveda's novel machine learning inference using **Python**, **Streamlit**, **Rdkit**, and **Poetry**; this application deployed on **AWS EC2** was utilized by >100 internal users and external clients.

### WPG Smart Water Public

Project Manager

Shanghai, CN

Dec. 2015 - Dec. 2017

- Won a bid worth 1.5 million for developing a smart water supply management platform.
- Worked with 6 stakeholders (including engineering and product teams) to improve deployment efficiency by 30% using **Agile** development to design the software system.

## PROJECTS

### Backend Project - Django Twitter

<https://github.com/YangQi007/django-twitter>

- Used push model to **Fan-out** news feeds.
- Applied **Redis** and **Memcached** to reduce direct reads and writes to DB; utilized Key-value store **HBase** to split DB queries for tables with fewer reads and lot writes.
- Implemented **denormalization** to store the number of comments and likes to reduce DB queries; employed **Message Queue** to deliver asynchronized tasks to reduce response time.

### Language Interpreter

<https://github.com/YangQi007/msdscript>

- Created a language interpreter based on C++ used as an executable program or a library; implemented features including parsing, arithmetic/logical operations, variable comparison, and function execution.
- Utilized **Unit test** tools and wrote comprehensive documentation.

## SKILLS

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