

# YIRAN XU

yiranxu10@gmail.com | (949) 975-9197 | Irvine CA, 92618 | [www.alexisxu.com](http://www.alexisxu.com)

## WORK EXPERIENCE

### 777 Partners

Software Engineer

Newport Beach, CA

May 2022 – Present

- Built an order manage system for multiple airline companies such as Flair and Bonza.
- Developed over 30 features using *Java* and *Spring Boot* for a *microservice-based* backend using *Agile methodology*.
- Designed tables in *PostgreSQL* database for relational information with *Hibernate ORM*.
- Optimized *Neo4j* database for flight information to increase flight searching speed.
- Designed ancillary/booking entity features and automations for passengers over 1000 flights with *Spring Boot scheduler*.
- Reduced the flight search time up to 30% by caching with *Hazelcast* caching on querying flight information.
- Devised a general structure and incorporated annotations to enhance code conciseness and facilitate code reuse.
- Utilized *Docker* and *Kubernetes* for deploying and managing applications to create a *distribution system*.
- Created and modified email templates sent from the system to identify different booking processes using *MailChimp*.
- Merged Apple/Android notification functionality with pub/sub in notification center to handle notification publishment.
- Provided support on receiving Apple/Android pay and handling the payment gateway with *WorldPay API*.
- Harnessed *Grafana* log to analyze and visualize logs can provide valuable insights into the behavior and performance.

### USC Prof. Ajitesh Srivastava's Lab

Web Developer

Los Angeles, CA

Aug 2021 – Dec 2021

- Implemented client-side user interface with *React.js* and *React hooks*.
- Maintained backend services with *Django* and using *GitHub* to fetch infection information.
- Created data visualization with *Nivo.js* and *Leaflet.js* to picture users' data categorized by location.

### Go-Well Electrical Technology Co, Ltd.

Software Engineer Intern

Shanghai, China

Jul 2019 – Sept 2019

- Fulfilled data visualization using *Matplotlib* for China International Industry Fair in the Big Data platform.
- Applied *Principal Component Analysis* with *Python* to analyze manufacturing process data.
- Utilized the combination of software systems and hardware devices to build a big-data application with “Industry 4.0” practical methods.

## PROJECTS

### Airbnb-clone Platform (Java)

May 2021 – Jul 2021

- Employed *Spring Boot* as backend and created *REST API*.
- Utilized *Amazon S3* buckets as data layer storage by connecting it with *MySQL* database.
- Implemented backend API with *MyBatis* generator to generate class API supported by *Swagger UI*.
- Integrated *MySQL* database with *Redis* as cache middleware to store bitmap data in the service layer.
- Reduced the pressure of queries for databases by appending the service interface to Redis.
- Created a webpage UI modeled after Airbnb with *React.js* and *Tailwind CSS*.
- Implemented certification using *Spring Security* to transfer the data with *JavaScript Web Token*.

## EDUCATION

### University of Southern California

M.S. in Electrical and Computer Engineering | GPA: 3.5/4.0

Los Angeles, CA

Aug 2020 – May 2022

Coursework: Java Programming, Database, Algorithm, Computer Networking, Random Processing, Information Theory

### University of California, Irvine

B.S. in Electrical Engineering (Digital Signal Processing Specialization) | GPA: 3.5/4.0

Irvine, CA

Sept 2016 – Jun 2020

Coursework: C Programming, Operating System, Assembly language

## SKILLS

Languages: Java, JavaScript, Python, HTML5/CSS, Tailwind CSS, Sass, TypeScript

Data Management: MySQL, PostgreSQL, NoSQL/MongoDB, Redis, Hazelcast, GraphQL, Neo4j

Backend: Spring Boot, Hibernate, Spring MVC, Spring Cloud, Spring Data, Java Persistence API, AWS, Flask, Node.js, Git

Frontend/App Development/DevOps: React.js, Angular, Android Studio, Docker, Kubernetes