

# YIRAN XU

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## WORK EXPERIENCE

### 777 Partners

Newport Beach, CA

Software Development Engineer

May 2022 – Present

- Consistently built different features on website and mobile app, added over 30+ features following **Agile methodology**.
- Optimized **Neo4j** database for flight information and **PostgreSQL** database for passenger information.
- Reduced the flight search time by 30% by using **Hazelcast caching** on querying flight information.
- Developed generic structure and annotations to concise and reuse the code.
- Designed ancillary/booking entity features for passengers over 1000 flights with **Spring Boot scheduler**.
- Created and modified email templates sent from the system to identify different booking processes using **MailChimp**.
- Merged **Apple/Android notification** functionality into a notification center to handle notification publishment.
- Provided support on receiving **Apple/Android pay** and handling the payment gateway with **WorldPay API**.
- Utilized **Docker** and **Kubernetes** for deploying and managing applications in a distributed environment.
- Harnessed **Grafana Log** to analyze and visualize logs can provide valuable insights into the behavior and performance.

### USC Prof. Ajitesh Srivastava's Lab

Los Angeles, CA

Web Developer

Aug 2021 – Dec 2021

- Implemented client-side user interface with React.js and React hooks
- Maintained backend services with Django and 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.

Shanghai, China

Software Development Engineer Intern

Jul 2019 – Sept 2019

- 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.
- Fulfilled data visualization using **Matplotlib** for China International Industry Fair in the Big Data platform.

## 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

Los Angeles, CA

M.S. in Electrical and Computer Engineering

Aug 2020 – May 2022

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

### University of California, Irvine

Irvine, CA

B.S. in Electrical Engineering (Digital Signal Processing Specialization)

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, Hibernate, NoSQL/MongoDB, Redis, Hazelcast, GraphQL, Neo4j

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

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