

Xuechun Hua

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GitHub: <https://github.com/XuechunHHH>

Education

University of Southern California | Los Angeles, CA

January 2023 – Expected May 2025

Master of Science, Computer Science (GPA 4.0/4.0)

Relevant Coursework: Introduction to Programming Systems Design, Web Technologies, Introduction to Computer Networks, Analysis of Algorithms

Nanjing University | Nanjing city, China

September 2018 – June 2022

Bachelor's degree, Mathematics and Statistics

Relevant Coursework: Discrete mathematics, Database, Linear Algebra

Technical Skills

Languages: Java, Swift, JavaScript, Solidity, HTML, CSS, SQL, MATLAB, TypeScript

Frameworks: Angular, Vue.js, Node.js, Express, Flask, SwiftUI, Spring

Databases: MySQL, Oracle, ClickHouse, Firebase, MongoDB

Internship Experience

Code Auditor, WatchPug Team | Web3.0 Code Auditing Team | China

06/2022 – 12/2022

- Developed and deployed an application platform for Web3.0 code auditing bounty program released and held embedded automated award distributing system on *Ethereum*.
- Collaborated with the team to audit *Solidity* projects from Top Web3.0 companies like Solana, Gelato, Sherlock, Sandclock etc.
- Ranked 1st for 2022 Web3.0 Auditing Team | <https://code4rena.com/leaderboard>.

DevOps Engineer, Uranus Research Co., Ltd | China

01/2022 – 05/2022

- Designed and implemented an automated system for real-time data retrieving from stock marketing. Utilized APIs to parse UDP packets from the exchange's servers and decoded the data within 50ms latency and 99.9% correctness, ensuring timely and accurate data reception.
- Set up and maintained Oracle and ClickHouse database on local server, ensuring data accessibility and integrity for stakeholders.
- Implemented and maintained a robust monitoring and alert mechanism to promptly notify relevant team members in case of system errors or anomalies.

Projects

Full-stack Searching Application: Events Around

03/2023 – 05/2023

- Link: <https://xuechunhhh.github.io/hw8/search/dist/>
- Independently developed a full-stack web application and an iOS version for searching and scheduling events around users.
- Built backend application with *Express* framework to support abundant *RESTful APIs* and solved issues caused by CORS.
- Used *AngularTS* on client side to build a *responsive* front-end leveraging *Web Storage* to permanently cache users' favorites.
- Utilized *APIs* from Ticketmaster, Spotify, Google Maps, Ipinfo, Facebook, and Twitter to retrieve data by *JSON* from different sources and enrich users' interactions experience.
- Developed an iOS version for the app with *SwiftUI*, leveraging *CocoaPods* to seamlessly integrate third-party libraries like *Alamofire*, *Kingfisher*, *Simple Toast* to retrieve data from the other platforms, display images and polish up the UI.

Cloud-Based Serverless Web Application: Embrace the World

05/2023 – 07/2023

- Lead a team of three to build a real-time networking application for chatting and making new friends with React and Node.js.
- Utilized *MongoDB* backend for data storage and *Redis* to cache, enabling users profile and information data stored accurately and retrieved with low latency.
- Managed message queues with *Bull* and *SocketIO* for real-time communication and maintained data integrity.
- Integrated Slack into *CI/CD Pipeline* with *CircleCI* and set up infrastructure using *Terraform* to avoid human error and enable seamless upgrade and deployment
- Configured *AWS* resources, including internet gateways, load balancers, S3 and auto scaling to handle large volume of requests

Full-stack Web Application: E-shop

07/2023 – 08/2023

- Independently developed a full-stack e-commerce website application to provide customers a fluent shopping experience.
- Configured *MySQL* database to store all products details and users' data, leveraging *encrypted verification* when storing privacy.
- Used *Spring Boot* environment to create a robust backend supporting payments with the *Stripe API*, embedded with an inventory administration panel, supporting secure user profiles and checkout
- Adopted *Vue.js* to create a customer-facing application. Enabling users to view product, create wish lists, manage their shopping cart and check out using Stripe securely.