

LONG Qianhui

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EDUCATION

Carnegie Mellon University - Information Networking Institute
Master of Science in Information Networking

Pittsburgh, PA
Sep 2024 - Dec 2025

Wuhan University - School of Computer Science

Wuhan, CN

Bachelor of Engineering in Software Engineering | GPA: 3.9 / 4.0 (Top 10%)

Sep 2020 - Jun 2024

Selected Coursework: Data Structure, Computer Networks, Operating Systems, Computer Organization and Design, Database systems, Object-Oriented Programming, Software Technology Fundamentals, Mobile Programming, Software Design and Architecture

Honors: Outstanding Graduate of Wuhan University; Outstanding Student Cadre of Wuhan University

PROJECTS

AI Speech Assistant | 

Jan, 2024 - Apr 2024

- Directed complete development process, including user surveys, requirement analysis, interface design, framework development, and thorough testing
- Leveraged SwiftUI to complete front-end framework, integrating third-party APIs/SDKs for language generation, speech services, and text translation, etc
- Built a stable backend framework based on Spring Boot, facilitating efficient data management and API design
- Enhanced efficiency by integrating MyBatis with MySQL, optimizing SQL operations and improving storage scalability

TOURMATE - Data-driven Tourism Service System |  

Apr 2023 - Jun 2023

- Developed a recommendation model leveraging the PaddlePaddle deep learning framework, enhancing accuracy of personalized attractions displayed on homepage by analyzing extensive user and attraction data
- Leveraged ant colony optimization to devise efficient, personalized travel itineraries aligned with user preferences and geographic data, ensuring optimized routes and schedules
- Implemented custom algorithms into backend, developing RESTful APIs to enhance front-to-back-end interactions

Urban Management Emergency Command and Dispatch System | 

Mar 2022 - Jul 2022

- Engaged in full-stack development of an emergency management and dispatch system, featuring functionalities including emergency map visualization, event reporting and assignment, duty scheduling, and command dissemination
- Developed system interface using Vue.js and Element UI, creating a navigable main menu and versatile table displays
- Integrated MiniMap, a government-private map framework, to display positions of city-wide emergency events and monitoring devices, enabling direct interactions for detailed information and module navigation
- Built back-end architecture with Spring Boot, incorporating Spring Security to enforce role-based access control and secure authentication mechanisms
- Implemented caching of notifications deploying Redis, ensuring timely delivery to users upon login, thus maintaining critical information flow during emergencies

SKILLS

Programming: Swift, Java, C/C++, Python, JavaScript, HTML, CSS, SQL, R

Framework & Tools: SwiftUI, Vue.js, Spring Boot, MyBatis, Git, Element UI, Three.js, Axios, Pytorch, NLTK

Cloud & Databases: MySQL, Redis

EXPERIENCE

Beijing Hi-tech Cloud Education Technology Co., Ltd

Beijing, CN

FRONTEND DEVELOPER INTERN

Jun 2023 - Jul 2023

- Collaborated to front-end development for a comprehensive system analyzing underwater structures
- Utilized Vue.js to construct a responsive menu architecture that facilitates efficient project search, viewing, and management
- Implemented an interactive 3D display using Three.js for visualizing image files, point clouds, and 3D models of underwater buildings.
- Created front-to-back-end data interactions using Axios, ensuring dynamic updates and accurate display of algorithmic processing results