Qianhui Long

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EDUCATION

Carnegie Mellon University - Information Networking Institute   Pittsburgh, PA
Master of Science in Information Networking | GPA: 3.8 / 4.0   Aug 2024 - Dec 2025 (Expected)
Coursework: Introduction to Computer Systems, Cloud Infrastructure and Services, Fundamentals of Telecommunications Networks

Wuhan University - School of Computer Science   Wuhan, CN
Bachelor of Engineering in Software Engineering | GPA: 3.9 / 4.0 (Top 5%)   Sep 2020 - Jun 2024
Coursework: Data Structure, Computer Networks, Operating Systems, Database Systems, Object-Oriented Programming, Mobile Programming, JavaEE Architecture Programming, Cloud Computing Platform and Technology
Honors: Outstanding Graduate of Wuhan University; Outstanding Student Cadre of Wuhan University

EXPERIENCE

Amazon.com, Inc.   Seattle, WA
Software Development Engineer Intern   May 2025 - Aug 2025
- Developed **visibility APIs** to enable users to efficiently track and query workflow executions on ORCA (Orchestration) platform
- Designed and implemented connector components to integrate **Amazon Bedrock**'s services with business workflows, providing seamless access to foundation models and knowledge bases
- Added support for the **Simple Issue Management (SIM)** ticketing system in orchestration workflows, enabling automated ticket retrieval and comment creation
- Built and productionized the **MCP Server** for ORCA (Orchestration) team, enabling LLMs to safely interface with external services through ORCA and bridging AI capabilities with business logic

Beijing Hi-tech Cloud Education Technology Co., Ltd   Beijing, CN
Software Engineer Intern   Jun 2023 - Jul 2023
- Contributed to **full-stack** development for a comprehensive system analyzing underwater structures, effectively serving over 1,000 personnel within the department
- Collaborated with algorithm teams to integrate modules for image and model processing, streamlining front-end and computational interactions
- Developed RESTful APIs using **Spring Boot** for features including project management, configuration, and 3D data generation
- Created an interactive 3D visualization panel with **Three.js**, making data interpretation more intuitive

PROJECTS

AI Speech Assistant   Jan 2024 - Apr 2024
- Independently managed the end-to-end development of an **iOS** application, covering user requirement analysis, framework design, implementation, and testing, culminating in a successful App Store launch with a 5.0-star rating
- Developed a stable backend in **Java**, enhancing database scalability and performance by integrating **MyBatis** with **MySQL** for SQL operations optimization and reducing query execution time by 25%
- Implemented a dynamic user interface with **SwiftUI**, integrating third-party APIs (Microsoft Azure, Minimax, iFLYTEK) for language generation, speech synthesis, and translation to create an intuitive and engaging user experience

TOURMATE - Data-driven Tourism Service System   Apr 2023 - Jun 2023
- Led a team of 5 in developing a web platform providing personalized tourism planning solutions
- Designed and deployed **backend** APIs for user authentication, profile management, and personalized recommendation retrieval, enhancing security and scalability
- Developed a recommendation model using **PaddlePaddle**, improving the precision of attraction suggestions by analyzing 10,000+ user profiles and attraction data
- Enhanced data processing pipelines with **Apache Spark** on a big data infrastructure, reducing preprocessing time by 30%

Urban Management Emergency Command and Dispatch System   Mar 2022 - Jul 2022
- Architected a secure backend with **Spring Boot**, incorporating role-based access control and advanced user authentication
- Delivered scalable **RESTful APIs** to facilitate event reporting, duty scheduling, and command dissemination, ensuring modular communication across services
- Integrated **Redis** for real-time caching to optimize emergency notification delivery and maintain system reliability during high-traffic events

SKILLS

Programming: Java, Python, C/C++, Swift, JavaScript, HTML/CSS, SQL
Framework & Tools: SpringBoot, Vue.js, Node.js, SwiftUI, Maven, MyBatis, Git, Model Context Protocol (MCP)
Cloud & Databases: MySQL, Redis, Docker, Kubernetes, Terraform, Google Cloud Platform (GCP), Amazon Web Service (AWS)