

Junran Tao

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EDUCATION

Stevens Institute of Technology

Master of Science in Computer Science

University of Shanghai for Science and Technology

Bachelor of Engineering in New Media Technology

Hoboken, New Jersey

Sep 2024 – May 2026

Shanghai, China

Sep 2019 – Jun 2023

SKILLS

Languages: JavaScript, SQL, C#, C/C++, Java, Python, HTML/CSS, Handlebars

Technologies: Node.js, Vue.js, React, .Net, Next.js, MySQL, MongoDB, Git, Redis, Docker, OpenLayers, Cesium.js

Core Courses: Data Structures, Algorithms, Web Programming, Distributed Systems, OS, Networking

PROJECTS

Stevens Institute of Technology

Travel Companion(Github)

Hoboken, New Jersey

Oct 2024 – Dec 2024

- **Designed secure authentication** using JWT and OAuth 2.0, enabling stateless session management and role-based access control.
- **Developed RESTful APIs** with Express.js, integrating pagination, caching (Redis), and rate-limiting to enhance performance and scalability.
- **Optimized MongoDB queries**, leveraging compound indexes and aggregation pipelines, reducing response times by 40%.
- **Implemented user profiles and social features**, including profile editing, travel route sharing, and interactive actions (comments, likes, follows).
- **Ensured robust system performance**, applying input validation, backend error handling, and secure file uploads with Multer and Sharp.

EXPERIENCE

EarthView Image Inc. (Geographic Information Industry Leader)

Full-stack Development Engineer

Chengdu, China

Jul 2023 – Jun 2024, Full-time

- **Optimized authentication system**, implementing token-based authentication, lazy-loading, and caching, reducing authentication latency by 30%.
- **Developed a geospatial analytics dashboard** using C, Vue.js, ECharts, and OpenLayers, enabling real-time GIS data visualization for municipal agencies.
- **Designed an intelligent form validation system**, integrating asynchronous validation, debouncing, and auto-save, reducing data entry errors by 40%.
- **Built a custom WebGIS map tiling system** with Cesium.js and OpenLayers, improving map load times by 50%, a key factor in securing a multi-million-dollar government contract.
- **Enhanced UI/UX efficiency**, implementing seamless page transitions and reducing rendering latency by 60%, improving system adoption.

Chengdu Yunshang Chuangxiang Intelligent Technology Co. LTD

Software Engineer Intern

Chengdu, China

Jun 2022 – Aug 2022, Internship

- **Developed microservices architecture** using Spring Boot Spring Cloud, reducing system latency by 40% and enhancing API scalability.
- **Implemented high-coverage testing**, designing JUnit and Mockito test cases, achieving an 85% test coverage rate.
- **Assisted in CRM platform integration**, improving system maintainability and handling 30% more concurrent users.
- **Conducted technical research and documentation**, contributing to architecture design discussions and best practices.

University of Shanghai for Science and Technology

DevOps Engineer

Shanghai, China

Sep 2020 – Apr 2021, Internship

- **Developed "Chinese Opera Search System"** using .NET SQL Server, managing 100,000+ data points efficiently.
- **Deployed the system on Ali Cloud**, optimizing performance and reliability.
- **Designed comprehensive functional and security test cases**, achieving over 95% test coverage.