

Portfolio & Blog

- <https://chenliudev.com>

Skills

- **Languages:** Java, JavaScript, Python, C++.
- **Frontend:** React.js, HTML, CSS
- **Backend:** Node.js, Spring Boot, Express.js, JWT, RESTful APIs, WebSocket, MySQL, PostgreSQL
- **DevOps&Cloud:** Docker, Nginx, AWS

Experience

Full-Stack Engineer

03/2025 - Current

Independent Project – Los Angeles, CA

- Developed and deployed a full-stack chat application, integrated into an existing portfolio website.
- Implemented **WebSocket** for real-time messaging, ensuring low-latency communication between clients.
- Configured **Nginx** as a reverse proxy within Docker Compose, reducing WebSocket communication lag by approximately 25% through optimized internal routing.
- Designed and developed secure backend **RESTful APIs** using **SpringBoot**, **Java** improving system scalability.
- Deployed using **Docker** and **AWS**, streamlining the deployment process and reducing deployment time by 30%.
- Integrated a **MySQL** database for message and user information storage, ensuring high performance.
- Utilized: WebSocket, React.js, Spring Boot, Spring JPA, MySQL, Docker, Nginx, AWS(EC2), Java, Javascript.

Full-Stack Engineer

09/2024 - Current

Independent Project – Los Angeles, CA

- Built a full-stack personal website that showcasing web applications, blog, documentations, demo.
- Developed a web application for tracking income, expenses, and viewing sorted transaction history.
- Designed and developed with **React**, **Vite**, and **JavaScript** reducing deployment time by 20%.
- Designed and developed secure backend **RESTful APIs** using Express.js, improving system scalability.
- Designed database using **MySQL** to store user information and data, enabling reliable data persistence.
- Implemented **JWT** -based authentication to secure API endpoints, enhancing overall application security.
- Integrated **third-party stock API** to retrieve and display real-time financial data, enhancing user experience with up-to-date market insights.
- Containerized and deployed application using **Docker** and **AWS**, reducing deployment time by 30%.
- Configured **Nginx** to proxy API requests, optimizing request routing and improving backend performance.
- Utilized: React.js, node.js, Express.js, RESTfull APIs, MySQL, Docker, Nginx, AWS(EC2), Javascript.

AI-Powered Crane Optimization

09/2024 - 12/2024

Academic Projects – University Of California, Riverside | Fall 2024

- Developed an **AI-driven** pathfinding algorithm to optimize crane operations in a port, enhancing efficiency.
- Implemented **A* search** with heuristic optimization, improving container movement efficiency by 25%.
- Designed a cost-efficient **logistics model** to optimize crane utilization and reduce idle time during port operations.

Education

Bachelor of Science: Computer Science

12/2024

University of California, Riverside - Riverside, CA

Coursework: Intermediate Algorithms, Machine Learning, Artificial Intelligence, Database Management Systems.

Languages

English

Chinese (Mandarin)

Korean