Chang Liu
Alpharetta, GA, 30005 | changliu5101@gmail.com| 608-896-0544

EDUCATION

University of Wisconsin-Madison   **Madison, WI**
Bachelor of Science, Computer Science   May 2026 (Expect)
Bachelor of Science, Data Science   May 2026 (Expect)
Related courses: Artificial Intelligence, Discrete Mathematics, Computer Engineering, Data Science Modeling, Big Data System, Human-Computer Interaction, Software Engineering, Machine Organization

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, Python, Kotlin, SQL, NoSQL, R, C, C#, C++, HTML
Tools/Frameworks: Spring Boot, React, Mockito, PyTorch, Node.js, RESTful, Git, GitHub, Unity, Figma, Jira, Android Studio, Cursor, Copilot, Docker, Kubernetes, Elasticsearch, Linux, GCP, ROS Noetic, URDF
Languages: English, Chinese, Korean (Beginner)

PROFESSIONAL EXPERIENCE

ZhengGong Technology Co.Ltd. | Beijing, China   May 2024 – Aug 2024
System Development Intern
- Assisted System engineer, including fixing program errors and writing partial code using **C** and **Java**.
- Product Testing: Test program on devices, report functionality, resulting approximately **$25000 revenue**.
- Company Publicity: Responsible for part of the **publicity and communication**, upgraded company website leading to a **20%** increase on company website page view.

RedBing LLC | Atlanta, GA, USA   May 2025 – Aug 2025
Software Development Intern
- Assisted in building and optimizing the company's e-commerce search platform, leveraging technologies like **Kafka**, **Elasticsearch (NoSQL)**, **Spring Boot**, **Maven**, and **Flask** to implement real-time indexing and full-text search capabilities.
- Developed automation scripts for data preprocessing, cleaning, and streaming, supporting scalable and efficient product search functionality.
- Collaborated with **frontend** to integrate advanced search features, improving product discoverability, navigation, and user experience for customers.

RESEARCH EXPERIENCE

People and Robots Lab | University of Wisconsin–Madison | Madison, WI   Oct 2025 – Present
Undergraduate Research Assistant
- Collaborating on a robotics project to integrate the **Meta Quest 3** headset with a **UR3e** robotic arm for immersive teleoperation and assistive task execution.
- Configuring **ROS Noetic, Unity, and the RAMPA++ framework** to enable cross-platform communication between VR and robotic systems.
- Assisting in integrating Unity Sentis and YOLOv5/YOLOv8/YOLOv11 models for on-device computer vision and object detection through the Meta Quest 3 camera API.
- Conducting user feedback sessions with volunteer participants to **evaluate VR–robot workflows** and iteratively **improve usability, accessibility, and system reliability**.

ACADEMIC PROJECT

SeeSafe Mobile Application| UW-Madison | Madison, WI   Sep 2024 – Dec 2024
- As **Project Manager** and **backend developer**, organizing tasks and presenting team progress reports.
- Developed an **Android mobile application** using **Kotlin**, aimed at assisting individuals with vision impairments by connecting them with volunteers for real-time assistance and guidance.
- Implemented advanced GUI components, including dialogs, menus, and fragments, to enhance user accessibility.
- Integrated multiple **APIs** to implement features such as **real-time video calls**, push **notifications**, and Text-to-Speech functionality.

DotTheWorld Interactive Travel Mapping App | UW-Madison | Madison, WI   Sep 2025 – Dec 2025
- Developed a **React**-based web application using **Vite** and **React Router**, enabling users to save, manage, and share travel destinations on an interactive map with real-time geolocation tracking.
- Implemented custom map pins, reverse geocoding (Nominatim API), and color-coded categories.
- Developed user authentication with profiles, Wishlist, and social features (comments, likes, replies).
- Designed a responsive UI using **React Bootstrap** with modals and dynamic navigation.

LEADERSHIP & INVOLVEMENT EXPERIENCE

Asian Women Basketball Club | UW-Madison | Madison, WI   Sep 2022 – Present
- Co-founder & Vice President

Adventure Learning Program (ALPs) | UW-Madison | Madison, WI   Oct 2024 – Present
- Facilitator, Risk Management Committee