

Tiansu Hu

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EDUCATION

- New York University** Sept. 2024 - Jun. 2026
Master of Computer Engineering - GPA:3.67 New York
- **Relevant Courses:** Computing Systems Architecture, Machine Learning, Network Security, Data Structure & Algs, Java, Big Data, Embedded System
- Beijing University of Technology & University College Dublin** Sept. 2020 - Jun. 2024
Bachelor of Software Engineering - GPA:3.66
- **Relevant Courses:** Data Structures & Algorithms, Database Systems, Machine Learning, HPC, Web Development
 - **Honors:** **Top 5%** in IEEEExtreme Global Programming Competition, **1st** Place in College Programming Contest
 - **Scholarships:** Outstanding Academic Performance Scholarship, Excellent Class Cadre Scholarship (2021-2023)

SKILLS

- **Programming Languages:** Java (Advanced) , Python (Advanced) , C++ , JavaScript
- **Frameworks and Libraries:** Node.js , React , Numpy , PyTorch , Bootstrap , Spring
- **Tools and Platforms:** Linux , Git , Docker , macOS , Windows
- **Language:** Mandarin Chinese (Native) , English (Fluent, TOEFL 106)

WORK EXPERIENCE

- Huawei Technologies** Jul. 2025 - Sept. 2025
Software Development Intern, Cloud Computing (IaC Platform) Beijing, China
- **Implemented pagination for Spring microservice APIs** in the **Infrastructure-as-Code (IaC)** platform using **MyBatis** and **MySQL** best practices, reducing database load while preserving backward compatibility. Applied defensive programming to prevent interface misuse, and delivered full **JUnit** test coverage.
 - **Triaged and fixed issue tickets** in a **Go backend** and its **Swagger/OpenAPI** specs; added **unit/integration tests** and coordinated multi-repo changes for a smooth **CI/CD** rollout.
 - **Independently identified and fixed bugs** in an internal **Python** dev tool; contributed the patch upstream and documented solutions, improving tooling usability and reducing onboarding time for new developers.
- Beijing Yiyong Technology Co., Ltd.** Jun. 2023 - Aug. 2023
Algorithm (NLP) Intern, Algorithm Department Beijing, China
- **Optimized UIE (Pytorch) model structure**, boosting prediction F1 by 10% through **pre-training and fine-tuning**.
 - **Leveraged Transformer-based models** to restore sentence structures, enhancing parsing accuracy for downstream tasks.
 - **Developed enhanced prompt optimization** strategies, resolving entity recognition issues with homonymous terms and achieving 12% higher precision in **entity-relation extraction** for medical text.

PROJECTS

- HuCares: AI-Driven Health and Wellness Management Platform** Mar. 2024 - Jun. 2024
Project Lead, Backend Developer
- **Led the development of a full-stack platform** with **SpringBoot** and **RESTful APIs**, **React** as frontend, serving 1,000+ users.
 - **Built an asynchronous data pipeline** with **Redis** caching , reducing AI-driven insight processing times by 30% using **event-driven** architecture and **parallel API** calls.
 - **Established CI/CD workflows** using **Docker** and **GitHub Actions** achieving automated deployments and 99.9% uptime.
- Online IDE and Interview Integration Platform** Sept. 2022 - Dec. 2022
Lead Developer
- **Developed a real-time collaborative IDE** using **TypeScript**, **React**, and **WebRTC**, enabling seamless audio/video conferencing and live code editing.
 - **Integrated an automated code quality evaluation** system with **Node.js**, provide instant feedback on coding results.
 - **Implemented a scalable backend architecture** for handling real-time video and code collaboration, ensuring low latency and high availability.
- ChatHu: P2P Chatting System** Sept. 2023 - Nov. 2023
Lead Developer
- **Developed** a concurrent P2P chat system using **Java**, supporting communication through **non-blocking I/O** and **asynchronous** message handling.
 - **Designed a multi-threaded server architecture**, enabling efficient user management, authentication, and peer discovery, handling up to 10,000 requests per second.
 - **Optimized** for fault tolerance and scalability, leveraging **thread safety** and **asynchronous operations**.