

Yuchao (Leo) Zhang

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SUMMARY

Full-stack software engineer and **Master's student in Computer and Information Sciences** at AUT, graduating October 2025.

Over **10 years of experience** in **Java backend, Android development, AI integration, and IoT systems**, delivering enterprise solutions in **industrial automation, mobile platforms, and edge AI**. Proficient in **Spring Boot, Docker, PyTorch, and microservice architecture**, with hands-on expertise in **AI-driven applications, full-stack systems, and cloud/edge deployment**.

KEY SKILLS

- **Programming:** Java, Kotlin, Python, JavaScript, Node.js, SQL, Bash
- **AI / ML:** PyTorch, TensorFlow, OpenCV, YOLO, diffusion models, LLM fine-tuning
- **AI Coding Tools:** Cursor, Trae, GitHub Copilot, Qwen, OpenAI API
- **Full-Stack:** Spring Boot, Spring Cloud, MyBatis, Hibernate, Vue.js, HTML/CSS
- **DevOps & Cloud:** Docker, Jenkins, Nginx, Git, CentOS, Ubuntu, Raspberry Pi, basic Azure
- **Databases:** MySQL, Redis, MongoDB, SQLite, SQL Server
- **IoT Integration:** UART, GPIO, barcode scanners, RFID, sensors, protocol adapters

EXPERIENCE

ChatClothes Virtual Try-On (AI Thesis Project) *AUT, NZ* 2024 – 2025
Sole developer of a multimodal AI try-on system with LLM control and edge deployment.

- **Built** modular pipeline: diffusion model (image generation) + YOLO (clothing detection) + LLM (prompt parsing)
- **Integrated** ComfyUI + Dify for orchestration, supporting browser and offline operation
- **Optimized** inference on Raspberry Pi 5, achieving low-latency edge performance
- Completed thesis 6 months early with demo and deployment guide

Smart Factory Backend System *Chunxiao Technology Co., Ltd., China* 2018 – 2024
Tech lead for a microservice-based textile factory system deployed across 5+ sites.

- **Designed and implemented** backend services with Spring Boot and MySQL/Redis
- **Managed** CI/CD and deployment via Docker, Jenkins, and Nginx on Linux servers
- **Integrated** RFID, barcode scanners, and conveyor systems for real-time process tracking

Enterprise Messaging System *Chunxiao Technology Co., Ltd., China* 2014 – 2023
Core Android & backend developer for real-time IM platform with 10,000+ daily users.

- **Developed** Android client using NDK-based TCP/UDP and backend using Spring Cloud + C++
- **Improved** connection stability and reduced message latency to **¡200ms**

Other Projects & IoT Solutions *Chunxiao Technology Co., Ltd., China* 2013 – 2023
Full-stack engineer for industrial, IoT, and public service applications.

- **Developed** forestry patrol app with GPS/photo logging and backend dashboard
- **Built** smart cabinet SDKs controlling locks, sensors, and lights via Android + REST APIs

- **Implemented** ad scheduling and monitoring for factory and retail displays
- **Automated** deployment and monitoring to maintain 99.9% uptime

EDUCATION

Master of Computer and Information Sciences *AUT, New Zealand* Jul 2024 – Oct 2025
Research focus: AI, lightweight model deployment, virtual try-on. Thesis submitted early.

Bachelor of Software Engineering *Hebei University of Science and Technology, China* Jul 2009 – Jun 2013
Received National Scholarship. Trained in Java, databases, and backend system design.

LICENSES & CERTIFICATIONS

• Software Design Engineer Certificate	<i>China Qualification Authority</i>	2019
• Network Communication Security Administrator	<i>China Qualification Authority</i>	2017
• Science and Technology Achievement Award (Smart Manufacturing)	<i>Hebei, China</i>	2020
• IoT Fundamentals (MOOC)	<i>Xi'an Jiaotong University</i>	2020