

# Hudson Xue

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## PROFESSIONAL SUMMARY

### AI & Software Development | Master of IT (Mar 2026) | Bridging business and technology with data-driven solutions.

With interdisciplinary training spanning AI, software engineering, and data science, I drive innovation and deliver cross-domain impact. I have local NZ work experience across cloud-based AI and web development, bringing a proactive, collaborative working style. I'm eager to apply my expertise to help address your organisation's most pressing challenges.

## EDUCATION

### University of Auckland

Master of Information Technology | GPA: 7.5 / 9 (Grade A)

Auckland, NZ

Mar. 2025 - Mar. 2026

- **Courses:** Software Tools and Techniques, Computing Education, Data Mining and Big Data, Health Data Analytics, Digital Health Design and Evaluation, IT Consultancy, System Dynamics and Modelling, Sustainable Transformation, Internship
- Hands-on experience with Azure/AWS and GenAI, with **local NZ experience in Machine Learning and DevOps**.

### Northeastern University

Bachelor of Computer Science and Technology | GPA: 4 / 5  $\approx$  90 / 100 (Grade A)

Shenyang, China

Sep. 2019 - Jul. 2023

- **Courses:** Data Structures, Database Principles, C Programming, Object-Oriented Programming in C++, Python Data Analysis, MATLAB for Data Science, Machine Learning, Deep Learning, Medical Image Processing, AI Internship
- Led 7 team projects as project leader, all graded A+. Completed graduation project on "Research and Implementation of VNF Deployment and Optimization Technology Based on Machine Learning," awarded as an **Outstanding Thesis (A+)**.

## SKILLS

- **Programming Languages & Databases:** Python, TypeScript, Java, C/C++, C# | MySQL, PostgreSQL, MongoDB
- **Web & Cloud & DevOps:** Next.js, React, Tailwind CSS, Node.js, Express, Qt | Azure, AWS, Docker, Git, Jira
- **Data & AI:** NumPy, Pandas, Matplotlib, scikit-learn, PyTorch, PySpark, SPSS, Power BI, Tableau, Stella, SAP
- **Language:** English (Professional working proficiency, TOEFL 95), Mandarin (Native/Bilingual proficiency)

## PROFESSIONAL EXPERIENCES

### Tie Limited

Machine Learning & DevOps Intern

Auckland, NZ

Sep. 2025 - Nov. 2025

- Architected an **Azure OpenAI-powered** LLM agent (Prompt Flow + Prompt Engineering + RAG) on **FastAPI**.
- Delivered a **Next.js** UI with fully **Dockerized** services and end-to-end **CI/CD on Azure via GitHub Actions**.

### BYD Precision Manufacturing Co., Ltd.

R&D Quality Management

Shenzhen, China

Jul. 2023 - Nov. 2024

- Managed full-cycle R&D quality for Tier-1 automotive components, covering **client and supplier coordination, test standards, trial assembly, quality issue resolution, OTS/PPAP approvals, and audits** in compliance with IATF 16949.
- Oversaw 6+ projects, supporting **APQP, PPAP, and FMEA**, deployed in **10+ vehicle models with 100% IQS compliance**.

### Zhibo Technology Co., Ltd.

Artificial Intelligence Engineer Intern

Shenyang, China

Jun. 2022 - Aug. 2022

- Executed **4+ ML projects** spanning bioinformatics classification, **XGBoost** ensembles, **LSTM/GNN** modeling (**NetworkX**), **ResNet**-based computer vision, and multi-agent reinforcement learning (**MADQN**), using **Scikit-learn & PyTorch**.

## PROJECT EXPERIENCES

### Mining Diabetes Risk Factors: A CRISP-DM Study

SPSS Modeler, Python, scikit-learn, PySpark

Auckland, NZ

Aug. 2025 - Nov. 2025

- Ran end-to-end KDD/CRISP-DM: **AS-IS** profiling  $\rightarrow$  prep/transform  $\rightarrow$  modeling/eval  $\rightarrow$  **TO-BE** deployment outlook.
- Built interpretable diabetes predictors across **SPSS · Python · PySpark**, distilling risk-factor insights for public health.

### PetConnect – Full-stack Web Application

Next.js, MongoDB, Prisma, Mapbox, Clerk, CometChat, Vitest, AWS Amplify

Auckland, NZ

Mar. 2025 - Jul. 2025

- Developed a cloud-hosted **map-based social platform**, enabling pet owners to connect, chat, and share updates.
- Integrated **Clerk authentication** and **CometChat** for cross-platform secure login and real-time messaging.

### Automating Programming Style Feedback Tool

OpenAI, Multi-agent LLM, Prompt Engineering, Python, JavaScript, LaTeX

Auckland, NZ

Mar. 2025 - Jul. 2025

- Led **LLM-augmented static analysis** research; built an automated workflow and a reproducible, large-scale benchmark.
- Architected a **GPT-4o/mini + PyLint/ESLint** framework; delivered two unscripted 8-min talks; **final paper graded A+**.

## EXTRA-CURRICULAR EXPERIENCE

### UoA 'Let's Talk' Program – Key Speaker

Auckland, NZ

- Participated in **60+** English discussion sessions, strengthening public speaking and cross-cultural communication.

### Auckland University Student Choir – Bass Singer

Auckland, NZ

- Trained in pop music vocal performance for 2 years; performed in **three charity concerts** in NZ for audiences of 400+.

## REFERENCE

Professor Paul Denny, Assistant Dean Academic, School of Computer Science, The University of Auckland, Ph: +64 9 923 7087