## **EDUCATION**

### **Bachelor of Computer & Information Science**

Auckland University of Technology 03 / 2021 - 06 / 2024

Major: Software Development **Data Science** 

# ZIYUAN ZHAO (MAX)

## Software Engineer

022 6511037

maxzhao0610@gmail.com



7 Golden Morining Drive, Albany, Auckland, New Zealand

## **SKILLS**

## Lauguages:

- Python
- Java
- C
- React
- C#

## AI & Machine Learning:

- Model Development
- Deep Learning Model Building
- **NLP Techniques**

#### Data Skills:

- SQL
- R
- Power BI
- Data Analysis

## Web Development:

- **Application Development**
- Website Creation

## Specialized AI Skills:

- **Prompt Engineering**
- Al Model Optimization

## **LANGUAGES**

English - Fluent

Chinese - Native

### **PROFILE**

Results-driven Full-Stack Developer specializing in Al integration for mobile and web platforms. Experienced in delivering intelligent applications with expertise in front-end (SwiftUI, React), back-end, and advanced AI capabilities like NLP and computer vision. Skilled in translating business needs into innovative software solutions. Seeking a full-stack role to apply my diverse technical background and collaborative skills.

#### **WORKING EXPERIENCE**

Software Engineer I 07 / 2024 - Present

Evolviontech Limited, NZ

Project 1: A versatile Discord Al Voice Assistant - Real-time speech recognition, text-to-speech, intelligent conversations, and full Chinese language support for personalized user interactions.

- Discord Bot Development: Designed and implemented the bot framework using discord.js, integrated voice and text commands, and configured user permissions.
- Al & Voice Integration: Leveraged DeepSeek API for intelligent conversations and PaddleSpeech for bilingual speech recognition and synthesis.
- Deployment & Maintenance: Coordinated cross-language systems, optimized audio processing, and ensured seamless bot deployment with ongoing updates.

Project 2: Al-Powered English Speaking Practice APP - Offering real-time pronunciation feedback, interactive scenarios, and personalized learning to enhance fluency effectively.

- iOS Development: Built responsive user interfaces using SwiftUI, integrated Core Data for storage, and implemented speech recognition via the iOS Speech Framework.
- Al Integration: Developed interfaces for DeepSeek Al API, implemented adaptive learning logic, and created algorithms for personalized feedback and voice analysis.

### **SELF-ASSESSMENT**

- Full-stack AI/ML
- Depth & Breadth of Techs
- Data-Driven Problem-Solving
- Rapid Learning & Adaptability
- Integration of Technology and business
- Collaboration & Execution

**Project 3: PhotoManager ios APP** – A SwiftUI-powered photo management app with an intuitive interface, optimized image loading, and plans for Al-driven photo analysis.aims to delivery fast photo management, 50% quicker organization, and 90%+ Al accuracy for smart categorization

- Photo Management Optimization: Developed intuitive browsing and efficient image loading using SwiftUI and Core Data to enhance performance for large libraries.
- Al Feature Design: Initiated plans for integrating FastViT-based photo analysis, enabling categorization and smart album creation.

### HAND-ON PROJECTS | 03 | 2023 - 06 | 2024

Quantified Information Extraction & Ontology Development (NLP)

A custom NLP solution for extracting quantitative data from unstructured text, enhancing accuracy and usability with ontology modeling and Al-driven entity relationship predictions.

**Technical Stack:** Python, SpaCy, Transformers (BERT), OWL/RDF, Rule-based Matching, Dependency Parsing

## Pneumonia Detection using CNN (Computer Vision)

A CNN-based solution achieving 92.6% accuracy for pneumonia detection from X-rays, optimized with data augmentation and deployed for scalable real-world inference.

Technical Stack: Python, TensorFlow, Keras, OpenCV, Albumentations

Reference available upon request