

# ZHENGXING GU

cnguzx@gmail.com

+8615888390620

www.linkedin.com/in/zhengxing-gu

## SKILLS

- Coding skills: C/C++, Python, PostgreSQL, Javascript, React, Git, Machine Learning, Deep Learning (Pytorch)
- Engineering skills: control system engineering
- Language: Mandarin (native), English (working proficiency)

## EDUCATION

### Master of Information Technology

September 2021 - December 2023

#### University of New South Wales, Sydney, Australia

- Weighted Average Mark: 87.1 / 100
- Key Courses: Artificial Intelligence, Machine Learning & Data Mining, Computer Vision, Neural Networks and Deep Learning, Web Front-End Programming, Data Structures & Algorithms

### Bachelor of Engineering

September 2017 - June 2021

#### Nanjing University of Science and Technology, Nanjing, China

- Major in Automation
- Weighted Average Mark: 87.05 / 100
- Key Courses: Optimization Theory & Application, Process Computer Control System, Embedded Control System & Application

## PROJECTS

### COMP6080 Web Front-End Programming

April 2023

- Utilized React and Javascript to write frontend of an online quiz website similar to Kahoot!
- Worked with Restful API to implement all the functionalities.

### COMP9444 Neural Networks and Deep Learning Group Project

June 2023 - August 2023

- Compared different machine learning and deep learning algorithms for Twitter Sentiment Analysis on a Kaggle dataset. Bi-LSTM with Attention after LSTM using concatenated word vectors achieves the highest accuracy of 97.5%.

### COMP9517 Computer Vision

July 2023 - August 2023

- Built different models to solve an animal detecting and classification problem on Penguins vs Turtles Kaggle dataset.
- Faster R-CNN, YOLO, CNN and traditional machine learning algorithms with HOG were compared. YOLO achieved 100% accuracy and CNN achieved 83% accuracy.

### COMP9415 Computer Graphics Group Project

October 2022 - December 2022

- Developed an educational game using Unreal Engine 5. The game focused on a simplified simulation of terraforming a planet into a habitable state. The player can plant trees, generate carbon dioxide, do mining and etc. to change the environment of a planet. By playing the game, players can learn the basic knowledge of Earth's environment.
- Ranked top 10 among all groups.

## AWARDS AND CERTIFICATIONS

- Standard Mental Health First Aider June 2023
- First Prize in the China Robot Skills Competition December 2019
- Second Prize in the Third National College Student Military Mathematical Contest in Modelling (China) June 2019
- "Three Good Students" of Nanjing University of Science and Technology 2018-2019
- First-class Scholarship of Academic Excellence (Nanjing University of Science and Technology) 2018-2019
- First Prize in China International Aircraft Design Challenge August 2018
- First Prize in the 27th "Innovation Cup" (Nanjing University of Science and Technology) May 2018
- New City Education Fund Scholarship (Nanjing University of Science and Technology) November 2017

## EXTRACURRICULAR

### UNSW New College Village Tennis Club

September 2022 – December 2023

### UNSW professional development program

- participated 3-day in-person workshop and completed a 10-hour virtual internship on Forage.

### Unmanned Aerial Vehicle Association (Nanjing University of Science and Technology)

September 2017 - June 2019

- Attended China Aeromodelling Design Challenge competition (water rocket with glider). After the rocket carried the glider to the sky, the water rocket separated from the glider and opened a parachute. A pilot will control the glider remotely. I was in charge of the parachute system of the model rocket and I also participated in making gliders and model rockets.
- In the second year after joining the club, I was one of the mentors to teach new members.

### Youth Volunteers Association (Nanjing University of Science and Technology)

September 2017 - June 2018

- Actively participated in various volunteer activities and was one of the people responsible for recording them.