

ZHE TONG

1/33 Enmore Rd, Newtown, Sydney, NSW, 2042.

+61481205970 | tz512960083@gmail.com

Github: <https://github.com/zhe-tong>

CAREER PROFILE

Graduated student of Master of Information Technology from University of New South Wales and graduated in Jan, 2023. Solid knowledge base of frontend development, strong skills in programming and huge passion for the IT industry, curiosity and patience of problem solving and multi languages skills. Seeking a position of website/APP development to fully utilise skills and knowledge for achieving professional growth and offer value added services to the prospective employer.

EDUCATION

University of New South Wales, AUSTRALIA

Feb 2021 – Feb 2023

Master of *Information Technology*

Main courses including: Database System, Bigdata Management, Artificial Intelligence, Neural Networks and Deep Learning, Computer Vision, etc.

Southwest University of Nationalities (SWUN), CHINA

Sep 2016 – Jun 2020

Bachelor of *Internet of Things*

The main courses including: Introduction to Programming Internet of Things Engineering, Computer Networks, Introduction to Databases, Data Structures, Electronic Circuits, Principles of Embedded Systems, etc.

WORK EXPERIENCE

CHENGDU CUIZHI TECHNOLOGY, CHINA(casual)

Dec 2017 – Jul 2018

- Participate in promoting cooperation between the company and local schools.
- Teach elementary school students basic programming knowledge and inspiring hundreds of kids get interested to programming.
- Took part in setting up of the platform of the company.

PROGRAM EXPERIENCE

Development of Meal Recommendation Website:

July 2022 – Dec 2022

Course COMP9900

- Leading a 5 members team built up a Meal Recommendation System, using *JavaScript*, *html*, *CSS* for front-end, *MySQL* for database and *python* for back-end.
- Implemented user registration and login functions and the function for user to publish recipes, "like"/comment/save the recipes, delete recipes and follow other users.
- Implemented the notification for user's subscriber's new recipes.

- Received grade 81/100.

Design and training the model for recognizing huge amount pictures:

Course COMP9444

July 2021 – Dec 2022

- Choosing Alexnet model, because while maintaining a low complexity, AlexNet can use GPU to complete network training tasks in a short iterative cycle.
- In the data processing part, using *transform.tensor* to get data and *transform.normalize* for normalization.
- Using *Adam* as the optimizer because of its computational efficiency, easy of implementation and small memory usage.
- Choosing *crossentropyloss* for the loss function cause its convergence speed is faster.
- Adding dropout to avoid over-fitting.
- Finally the correct rate is 83%.
- Received grade 81/100.

Biological Cell Detection and Tracking Based on Image Recognition Technology:

Course COMP9517

July 2021 – Dec 2022

- Modeling every cell and record its ID information, cell center point, size, area, color, state, movement trajectory. And then ordered them.
- In the preprocessing, *contrast stretching algorithm*, binarization treatment and *flood flooding method* have been used to separate the cells.
- Using *findContours* from *OpenCV* to Detect cells, and similarity algorithm be designed to calculate the distance to track the cells.
- Received grade 74/100.

Development of Tourist Guider Booking Application Based on Android:

Graduation design of SWUN

Feb 2020 – Jun 2020

- Built up an online tourist guider booking system based on Android, which is a rapid development based on *ThinkPHP* framework. Using *JAVA*, *Android*, *PHP* and *MySQL*. And using *okhttp* to request the calling to the network.
- Implemented the functions including register and sign in/out, placing order by guest, selecting order by guider and selecting guider by guest then.
- Implemented the search function for local attractions in the app through *Baidu map interface*.

SKILLS

- Software/Java – Intermediate
- Software/JavaScript – Basic
- Software/Python - Upper Intermediate
- Language/Mandarin - Native Speaker
- Language/Mongolia - Basic