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## Education

### Australian National University

Master of Computing (Specialization: Machine Learning)

Canberra, Australia

July 2020 – Dec. 2022

- **Overall GPA:** 6.69/7.00;
- Equal to H1

### Nanjing University of Science and Technology

Bachelor of Engineering in Mechanical Engineering

Nanjing, China

Sept. 2015 – June 2019

- **Overall GPA:** 3.38/4.00; **Last two years GPA:** 3.60/4.00;
- First Prize University Scholarship for 2 times (Rank 1/268, Spring 2018 – Fall 2018);
- Third Prize University Scholarship for 3 times (Rank 25/268, Fall 2016 – Fall 2017);
- Excellent Graduate of Nanjing University of Science and Technology

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## Publication

- Shiqiao Zhou, Chen Yuan, Zhanpeng Meng, A Semi-Automatic Fruit Picker, Chinese Patent for Invention

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## Research Experiences

**Comparing DL and BERT Methods on Commits' Frustration Detection** July 2022 – Nov. 2022  
*Master Graduation Project*

- Worked on 2.1M commits of software projects in three different programming languages (Java, Python, C) to detect expressions of frustration by different DL and BERT models
- Analyzed the insights in the results produced by these models and prepared for writing paper for top conference

**End-to-end Human-Object Interaction Network with Multi-modal Prior** July 2022 – Nov. 2022

- Proposed a new one-stage HOI detector predicting HOI results by a multi-modal anchor with my teammates
- Implemented Verb Semantic Model to inject dataset-specific priors in word embedding and modified model encoder by using Grouping ViT inspired from top-conference papers

**The 5<sup>th</sup> APAC HPC – AI competition**

June 2022 – Nov. 2022

- Modified Unet, Resnet, ViT and other DL models to improve the accuracy and efficiency of putative transcription factor binding sites --- a segmentation-like task
- Utilized multiple GPUs provided by the HPC to boost the model training process
- **Honors:** Merit Prize

**Design of trajectory optimization and control system for virtual photographic robot based on 6-DOF serial robot**

Dec. 2018 – June 2019

*Undergraduate Graduation Project*

- Solved Jacobian pseudo-inverse matrix of photographic robot and obtained the inverse kinematics numerical solution of the photographic robot by Newton iteration method

- Carried out a simulation of the shooting path of virtual photographic robot in MATLAB
- **Honors:** Excellent graduation design in Nanjing University of Science and Technology

### **The Motion and Visual Control of the Mobile Robot Car**

July 2018 – Aug. 2018

*Scientific Research Project of Chinese Academy of Sciences*

- Created fully mathematical preparations for robotics, including position and posture representation, coordinates transformation, matrix rotation
- Conducted the trajectory planning based on the Cartesian space, and converted the continuous map signals into digital signals

### **Steerable Fruit Picking Device**

Sept. 2017 – May 2018

- Accomplished the overall mechanical structure design which consisted of operating unit, two telescopic rods, picking unit and collection & buffer unit
- Used Arduino Nano as main controller, designed the hardware circuit part and, wrote the control program
- **Honors:** 1<sup>st</sup> award in Provincial Mechanical Innovational Design Competition, 1<sup>st</sup> award in College Mechanical Innovational Design Competition, 2<sup>nd</sup> award in College Innovation Cup

## **Teaching Experiences**

### **Teaching Assistant of COMP4650 Document Analysis, ANU**

July 2022 – Dec. 2022

- Responsible for teaching 10 tutorials, marking two assignments and answering questions

## **Employment Experiences**

### **AI Algorithm Intern, Pharmcube Ltd.**

Mar. 2022 – July 2022

- Built Rule-based and machine learning models to do IR and NER tasks on clinical data
- Responsible for data pre-processing on large dirty clinical data

### **Software Development Intern, Bosch (China) Investment Ltd.**

Dec. 2020 – Jan. 2021

- Mainly responsible for debugging, testing and coding in Python script for project data
- Responsible for requirement management

## **Other Information**

**Professional Skills:** Python, Pytorch, Tensorflow, Java, MATLAB, AutoCAD, SolidWorks

**Hobbies:** Board Games, Singing, Reading

**Language:** TOEFL 91, GRE 321+3.0, CET-6 589