# Yifei Yue

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### **EDUCATION**

# BS in Computer Science, Faculty of Engineering, University of New South Wales

2021 - present

- Cumulative WAM: 86.5 (High Distinction)
- Relevant Modules:
  - Database Systems; Database Systems Implementation; Algorithm and Programming Techniques; Computer Vision; Neural Networks and Deep Learning; Machine Learning and Data Mining; Software Engineering Fundamentals; Higher Mathematics 1A, 1B; Professional Issues and Ethics in Information Technology
- Obtained the qualification of exchange student at the National University of Singapore in the first semester of 2023

# BSc in Computer Science (Hons), Department of Computer Science, University of Nottingham

2018 - 2021

- Cumulative GPA before transfer: 3.93 / 4.00
- The Dean's Scholarship

#### RESEARCH EXPERIENCE

### **Automatic Keyword Detection in Social Media**

2020 - September 2021

- The text data of social media has strong timeliness, relatively short text length, more colloquial text language and strong user interaction.
- Proposed a novel approach which combine the distinct attributes of social media with the LDA topic model.
- Achieved higher precision and recall than several baseline models for keyword detection.
- The project is accepted by 2021 Sigma Xi (The Scientific Research Honor Society) Student Research Showcase.

### Constructing a Virtual Human that can Communicate Intelligently with Users September 2020 – June 2021

- Created a virtual human model by Unity3D, and implemented its facial expressions, body movements, speech synthesis and lip synchronization.
- Implemented a central decision-making system to integrate other virtual human functions, such as facial recognition, speech recognition and body movement recognition.
- Achieved the interaction between the virtual human and users, including calling the name and starting the
  conversation, playing the game of rock and paper scissors by identifying the user's actions, as well as some
  basic conversations, etc.

### **WORK EXPERIENCE**

# **Tutor, Chestnut Education**

August 2022 – present

- Responsible for teaching the techniques for design and performance analysis of algorithms for a variety of computational problems.
- The teaching content mainly includes asymptotic notations, bounding summations, recurrences, best-case, worst-case, average-case analysis, and design techniques such as divide and conquer, greedy method, dynamic programming and maximum flow algorithm.

# Research Intern, NVIDIA Joint-Lab on Mixed Reality, NVIDIA Technology Centre June 2021 – September 2021

- The topic of the project is to explore how can machine learning-based emotion classifier facilitate the transfer of emotions and expressions in verbal communication in an augmented reality (AR) environment.
- Developed a virtual chatroom which is similar to Zoom to simulate the AR environment.
- Implemented a real-time facial emotion recognition system and integrate into the virtual chatroom. The emoji with the relevant emotion is used instead of the user's real face to protect the user privacy.

# Visual development Leader, The robot team of the University of Nottingham September 2019 – June 2021

- Participated in the largest robotics competition RoboMaster in China founded by DJI and served as the leader of the robot vision development team
- Responsible for the visual development (automatic aiming system) of land robots and drones and promoting the development progress of the team.
- The team won the second prize in the 2021 competition.

### Data Mining Intern, UNNC-NFTZ Blockchain Laboratory

May 2020 - August 2020

- Responsible for data mining of some major commercial databases, such as Tianyan Check, Wind, Csmar and Incopat.
- Responsible for preprocessing more than 200,000 enterprise information data as part of the data source of a new green financial database.

#### **VOLUNTEER EXPERIENCE**

## Peer Mentor, University of Nottingham Ningbo China

**September 2019 – June 2020** 

- Served as the peer mentor of class CS1921, responsible for providing assistance to students with academic and life issues.
- Responsible for the electing of class committee, hosting class meetings and other activities, sorting out student profiles.

# Student Representative, University of Nottingham Ningbo China

November 2018 – May 2019

- Responsible of managing class leaders of all computer classes, hosting meetings with class leaders and collecting ideas from computer science students.
- Responsible for reporting to staff representatives twice a week about student's ideas or suggestions and discussing these with staff representatives about course improvement.

# International Volunteer, Sri Lanka International Volunteer Project

January 2019 - February 2019

 Responsible for teaching English and campus renovation for local kindergartens in a Sri Lanka village for a week.

### **OTHER INTERESTS**

Video game is a key area of interest for me. I take part in many related competitions in my spare time. Apart from that, in 2021, I also tried to start my video game livestreaming, hoping to record my life. And now, I have become an online game streamer with more than 10,000 fans.