# YUEQING XUAN

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### **TECHNICAL SKILLS**

Programming Languages:

Python (PyTorch, Keras, OpenCV, Scikit-learn, NumPy,

Pandas), Java, C, JavaScript, NetLogo

Database Management Systems: Oracle Database
Business Intelligence Software: SAP Lumira, SAS

### **EDUCATION**

# Master of Information Technology, University of Melbourne

Feb 2020 - Now

Specialized in Artificial Intelligence

WAM: 84.29

- **Relevant Coursework**: Natural Language Processing, Statistical Machine Learning, Computer Vision, AI Planning for Autonomy, Computational Modelling, etc.
- Achievements: First Class Honours (H1) in 77% subjects. Second Class Honours Division B (H2B) in 33% subjects.

# **Bachelor of Commerce, UNSW Sydney**

Jul 2015 – Jul 2018

Major in Accounting and Information Systems

- WAM: 74.5
- **Relevant Coursework**: Database Management and Big Data, Information System in Business, Business System Analysis, Programming for Business, etc.
- Achievements: High Distinction average in programming subjects, Distinction average in accounting subjects, Second in COMP1531 (Software Engineering Fundamentals)

### **ACADEMIC PROJECT**

# Research Project - Multi-modal Entity Linker, University of Melbourne

Jul 2021 – Nov 2021

- Proposed a multi-modal entity linker that identifies the target and/or receptacle objects within verbal commands through machine learning and performs visual-textual entity linking.
- Performed end-to-end evaluations on the voice-controlled robotic arm control framework.
- Supervised by Dr. Lea Frermann and Dr. Adi Tarigoppula.
- Achieved 91 (First Class Honours) in this research project.

# Rumour Detection and Analysis on Twitter, University of Melbourne

May 2021

- Built a rumour classification model via BERT in PyTorch for detection of rumour tweets.
- Applied the classifier to analyse the characteristics of COVID-related rumours on Twitter.
- Ranked in the top 15% in the leaderboard.

# Autonomous Player in Game Sequence, University of Melbourne

May 2021

- Implemented an autonomous agent based on reinforcement learning, which can play in the game Sequence.
- Ranked in the top 10% in the final competition.

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- Created an agent-based model in NetLogo to investigate the role of asymptomatic individuals in spreading COVID-19.
- Designed experiments to explore the effectiveness of isolation for disease control.

### **Event Management System, UNSW**

May 2018

- Developed an Event Management System in Python and HTML that features event creation and registration for UNSW staff and students.
- Achieved High Distinction in this project.

#### **EMPLOYMENT**

#### **Casual Research Assistant**

Nov 2019

The University of Melbourne, Melbourne

- Worked on the research project: Humanoid robotic arm control through verbal commands.
- Successfully integrated the Porcupine Wake word engine and IBM Watson speech recognition into the robotic arm control framework.
- Streamlined the entire pipeline that allows the control of the anthropomorphic robotic limb using verbal (natural language) commands to perform various reaching and grasping movements.

### **IT Support and Business Analyst Internship**

Mar 2019 – May 2019

The Altius Group, Sydney

- Effectively managed, configured and troubleshoot a range of IT-related systems.
- Responsibly implemented and administrated database documentation, guidelines, policies and procedures.
- Performed application and hardware configuration deployment and troubleshooting.

### **GIS Data Processing Internship**

Nov 2016 – Feb 2017

Shanghai Institute of Technical Physics of the Chinese Academy of Sciences, Shanghai

- Worked effectively in the Big Data team to analyse Geographic Information System (GIS) data by utilising the ContextCapture software.
- Designed and maintained database architecture, data structures, tables, dictionaries, and naming conventions to ensure the accuracy and completeness of all data master files.
- Performed the operational establishment and preventive maintenance of backups, recovery procedures, and enforced security and integrity controls.

# **PERSONAL ATTRIBUTES**

- **Strong teamwork skills** Worked smoothly and effectively as a team member through collaboration, effective communication, and providing assistance with a positive manner.
- **Problem-solving skills** developing both creative and practical solutions to solve identified issues and discrepancies, and contribute to effective outcomes.
- Time management skills Managing time effectively through prioritising and making
  judgments about what is urgent or important, and coordinating different tasks to meet
  deadlines.

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