

# David Jiashu Wu

## PERSONAL INFORMATION

---

Male | DoB: 13<sup>th</sup> Jun 1997 | Beijing Haidian  
LinkedIn: [linkedin.com/in/jiashu-wu/](https://www.linkedin.com/in/jiashu-wu/)

Email: [js.wu@siat.ac.cn](mailto:js.wu@siat.ac.cn) | [jiashu@student.unimelb.edu.au](mailto:jiashu@student.unimelb.edu.au)  
GitHub: [github.com/jiashuwu](https://github.com/jiashuwu)

## EDUCATION BACKGROUND

---

**The University of Melbourne** 2019.02 – 2020.07

**Master of Information Technology (with Distinction)**, with WAM **88.1 First Class Honours**, top 2%

Stream: **Artificial Intelligence**

Major curriculums: Distributed Systems, Database System, Machine Learning, Natural Language

Processing, Artificial Intelligence, Deep Learning, Information Retrieval, Recommender Systems etc.

**The University of Sydney** 2016.02 – 2018.12

**Bachelor of Science**, weighted average mark **86.5 High Distinction**

Top 2% in Faculty of Science, entered **Talented Student Program**

Major: **Computer Science**, weighted average **85 High Distinction**

Major curriculums: Operating Systems, Database, Algorithm and Complexity, Computer network, Data Analytics, Machine Learning, Human-Computer Interaction, Website Design, Project Management etc.

Major: **Financial Mathematics and Statistics**, weighted average **88 High Distinction**

Major curriculums: Statistical Models, Data Analysis, Financial Mathematics, Computational Science, Statistical Tests, Stochastic Processes, Time Series Analysis, Optimization, Statistical Learning etc.

**Beijing Institute of Technology** 2015.08 – 2016.01

Major in software engineering, transferred to University of Sydney in 2016

## SCHOLARSHIP

---

2019 **Dean's Honours List** School of Engineering, University of Melbourne

2018 **Dean's List of Excellence in Academic Performance** Faculty of Science, University of Sydney

2017 **Dean's List of Excellence in Academic Performance** Faculty of Science, University of Sydney

## RESEARCH EXPERIENCE

---

2020 **Student Intern at Chinese Academy of Sciences** 2020.09 - Current

Centre for Cloud Computing, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

Supervisor: Professor Yang Wang, Centre for Cloud Computing, SIAT, Chinese Academy of Sciences

- Work on challenging cloud computing topics including dynamic resource allocation, resource partitioning, machine learning-based parallel file system performance optimization, storage system performance evaluation etc.
- Conduct thorough research, submitted 4 papers and 8 patents.
- Participated in several Chinese national and provincial cloud computing projects.

2019 **Student Intern at Beijing Institute of Technology** 2019.11 – 2020.03

School of Computer Science and Technology, Beijing Institute of Technology

Project Title: Simultaneous Semantic Alignment Network for Heterogeneous Domain Adaptation

Supervisor: Associate Professor Shuang Li, School of Computer Science and Technology

- Tackle Heterogeneous Domain Adaptation (HDA) problem, where the source and the target domains have heterogeneous feature representations, and may also come from diverse modalities.
- Utilize knowledge distillation to transfer the semantic knowledge between two domains. Together with explicit semantic alignment, it enhances the adaptability of the purposed model.

2021.01

- Carry out research on popular methods that utilize drawing to detect Parkinson Disease
- Develop an Android App that is capable to collect user's drawing trace data on various different pattern templates.
- Manage data using SQLite3, the data collected helps the lab to carry out further research on Parkinson Disease diagnosis.

2020 Jiashu Wu, Yang Wang , Ziyue Hu, Xiaopeng Fan, Kejiang Ye and Chengzhong Xu, "Towards faster theta-join: A pre-filtering and united partitioning approach". (Submitted to the IEEE Transaction of Big Data)

2021	A probabilistic application recommender system based on user feature clustering and user behaviour information (China Patent Submitted)
------	---

Jiashu Wu	Résumé	2021.01
2020	A machine learning based multi-scenario dynamic online resource allocation algorithm (CN202011428352.9)	
2020	A deadlock-free high concurrency dynamic resource partitioning algorithm (CN202011384022.4)	
2020	A publication retrieval model's training method, mechanism, end device and storage medium (CN202011403845.7)	
2020	A knowledge tree-based publication retrieval algorithm, mechanism and end device (CN202011433146.7)	
2020	A lock-free distributed deadlock avoidance algorithm, and its related mechanism, computer device and readable storage medium (CN202011438337.2)	
2020	An online data stream theta-join optimization algorithm, system, end device and storage medium (CN202011435327.3)	

## INTERNSHIP EXPERIENCE

---

2020	<b>Software Engineer at Melbourne eResearch Group</b>	2020.03 – 2020.06
	<ul style="list-style-type: none"> <li>Develop a meeting speaker diarization Android App. The app will then be used by UniMelb Library for research purposes.</li> <li>The app utilizes Material Design Components, as well as Google ML Speech API. Well-commented code and the documentation is publicly available.</li> </ul>	
2017	<b>Mentor at School of Information Technology, University of Sydney</b>	2017.03 – 2017.11
	<ul style="list-style-type: none"> <li>Mentor for course INFO1003 Website Design, INFO1103 Java Programming and INFO1105 Data Structures.</li> <li>Help tutor to answer questions, share my experience with students, demonstrate an excellent communication skill and interpersonal skill.</li> </ul>	

## PROJECT

---

<b>Kaggle Twitter Author Attribution</b>	2019.07 – 2019.09
<ul style="list-style-type: none"> <li>Use Python to clean and processes 300k Tweets, conduct feature engineering and feature selection. Utilize SMOTE algorithm to solve the sample imbalance problem.</li> <li>Experiment using algorithms including SVM, RF, TextCNN, TextRNN and FastText. Successfully achieve 30% classification accuracy, and rank 20/200 on Kaggle.</li> </ul>	
<b>BitBox Distributed File System</b>	2019.03-2019.06
<ul style="list-style-type: none"> <li>Use Java to implement a distributed file system, capable of synchronizing file directories between peers in a decentralized network.</li> <li>Clients can securely communicate with the BitBox peers, using public-private key cryptography.</li> </ul>	

## TECHNICAL ABILITY

---

**Programming** - Mainly use Python (NumPy, NLTK, Matplotlib, Sklearn, PyTorch, Pandas etc.) and Java, SQL, R (hypothesis testing, statistical analysis, plotting, time series analysis etc.), able to use C, Haskell, and MATLAB.

**Technical Skills** – Database, Data Mining, Data Analysis, Statistics, Machine Learning, Deep Learning, Distributed Systems.

## LANGUAGE ABILITY

---

<b>Chinese</b>	Native Speaker
<b>English</b>	IELTS Academic 7.0, with reading 8.0, listening 8.0, speaking 6.0 and writing 6.0; CET4 overall 665, achieved full mark in reading; Lived and studied in Sydney Australia for three years and Melbourne Australia for two years.