

# Jiashu Wu

Ph.D. Student, University of Chinese Academy of Sciences

DoB: 13<sup>th</sup> Jun 1997

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## EDUCATION

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### University of Chinese Academy of Sciences

Doctor of Philosophy in Computer Science, advisor: Prof. Yang Wang

Beijing, China

Sept 2021 - Jun 2024 (Expected)

### University of Melbourne

Master of Information Technology (with Distinction)

Melbourne, Australia

Jan 2019 - Dec 2020

Major: artificial intelligence, advisor: Prof. Rui Zhang, average mark: 88.1 (First Class Honour, top 2%)

### University of Sydney

Bachelor of Science

Sydney, Australia

Jan 2016 - Dec 2018

Major: Computer Science, Financial Mathematics & Statistics, advisor: Prof. Simon Poon, average mark: 86.5 (High Distinction, top 2%)

## RESEARCH INTERESTS









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My research interest focuses on applying domain adaptation to enhance the efficacy of IoT intrusion detection.

## PUBLICATIONS (\*CO-FIRST AUTHOR, FULL LIST: GOOGLE SCHOLAR)

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I: IoT Intrusion Detection via Domain Adaptation and its Efficiency Improvement

1. Heterogeneous Domain Adaptation for IoT Intrusion Detection: A Geometric Graph Alignment Approach  
**Jiashu Wu**, Hao Dai, Yang Wang , Kejiang Ye, Chengzhong Xu  
*IEEE Internet of Things Journal* (**IEEE IoTJ**, IF: 10.24), 2023
2. Cost-Efficient Sharing Algorithms for DNN Model Serving in Mobile Edge Networks  
Hao Dai, **Jiashu Wu**, Yang Wang , Jerome Yen, Yong Zhang, Chengzhong Xu  
*IEEE Transactions on Services Computing* (**IEEE TSC**, IF: 11.02), 2023
3. Joint Semantic Transfer Network for IoT Intrusion Detection  
**Jiashu Wu**, Yang Wang , Binhui Xie, Shuang Li, Hao Dai, Kejiang Ye, Chengzhong Xu  
*IEEE Internet of Things Journal* (**IEEE IoTJ**, IF: 10.24), 2022
4. PackCache: An Online Cost-driven Data Caching Algorithm in the Cloud  
**Jiashu Wu**, Hao Dai, Yang Wang , Yong Zhang, Dong Huang, Chengzhong Xu  
*IEEE Transactions on Computers* (**IEEE TC**, IF: 3.18), 2022
5. Towards Scalable and Efficient Deep-RL in Edge Computing : A Game-based Partition Approach  
Hao Dai, **Jiashu Wu**, Yang Wang , Chengzhong Xu  
*Journal of Parallel and Distributed Computing* (**JPDC**, IF: 4.54), 2022
6. Simultaneous Semantic Alignment Network for Heterogeneous Domain Adaptation  
Shuang Li, Binhui Xie, **Jiashu Wu**, Ying Zhao, Chi Harold Liu , Zhengming Ding  
*ACM Multimedia* (**ACM MM**, IS: 12.9), 2020, Seattle, Washing, USA
7. Adaptive Bi-Recommendation and Self-improving Network for Heterogeneous Domain Adaptation-assisted IoT Intrusion Detection  
**Jiashu Wu**, Yang Wang , Hao Dai, Chengzhong Xu, Kenneth B. Kent  
Under review at *IEEE Internet of Things Journal* (**IEEE IoTJ**, IF: 10.24), 2023
8. Open Set Dandelion Network for IoT Intrusion Detection  
**Jiashu Wu**, Hao Dai, Yang Wang , Kenneth B. Kent, Chengzhong Xu  
Under review at *ACM Transactions on Internet Technology* (**ACM TIOT**, IF: 3.99), 2023

## II: Thesis

10. Research on IoT Intrusion Detection via Domain Adaptation Approach  
*Ph.D Thesis at the University of Chinese Academy of Sciences*
11. Learning to Rank with Small Set of Ground Truth Data  
*Master Thesis at the University of Melbourne*

## III: Patents

Five Chinese patents already be granted and 14 Chinese patents under examination

## AWARD

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- Outstanding Student, University of Chinese Academy of Sciences, 2022
- Graduate with Distinction, University of Melbourne, 2020
- Dean's Honours List, University of Melbourne, 2019
- Dean's List of Excellence in Academic Performance, University of Sydney, 2018 & 2017

## EXPERIENCE

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*Software Engineer at Melbourne eResearch Group* Mar 2020 - July 2020, Melbourne Australia  
Develop a meeting diarisation Android app for research purposes. Key skills including Java programming, Git and the interaction with Google ML Speech API.

*Student Intern at Beijing Institute of Technology* Nov 2019 - May 2020, Beijing China  
Carry out research on domain adaptation and propose a novel simultaneous semantic alignment network. Key skills including DL algorithm design, Python programming and research paper writing (published in ACMMM'20).

*Research and Development Engineer at University of Melbourne* Jul 2019 - Nov 2019, Melbourne Australia  
Develop an academia searching platform under the challenging data-scarce condition. Key skills including Python programming, NLP data processing and recommender system algorithm design.

*Dalyell Scholar Program at University of Sydney* Mar 2018 - Jul 2018, Sydney Australia  
Carry out research on Parkinson disease detection via drawing patterns and develop an Android app for drawing data collection. Key skills including Java programming and database management.

## SKILLS

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Programming Skill: Python, Java, Matlab, SQL, R

Language Skill: English (IELTS Academic 7.0, live and study in Australia for 5 years), Mandarin Chinese (Native Speaker)