# YUN LI

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## ABOUT ME

I am Yun Li, a postdoc fellow at CSIRO's Data61, aiming to prompt the development of machine learning and artificial intelligence. Before that, I received my PhD degree in Computer Science from the University of New South Wales, Australia, under the supervision of Prof. Lina Yao and Prof. Wenjie Zhang.

I serve as the reviewer or program committee member for a set of prestigious conferences and journals such as MM, AAAI, CIKM, The Web Conf, TCSVT, KNOSYS, TMM, etc, and serve as the Sponsorship Chair for ADMA 2024 (Top Data Mining Conference). I am also a recipient of the 2021 Google PhD Fellowship (only 4 PhD student awardees in Australia) and the 2023 Dean's Award for Outstanding PhD Theses (Top 10% of the PhD theses).

I have over 20 research papers accepted and published by top-tier academic conferences and journals, such as ICCV, TPAMI, AAAI, TMM, VLDBJ, etc. My research interests includes Data-efficient Computer Vision (such as zero-shot learning and meta-learning) and Transferable Machine Learning (such as domain adaptation and transfer learning), focusing on developing deep learning algorithms using fewer resources (such as human annotations) and having more applied domains. My research contributes to various applications in computer vision, genetic analysis, medical image predictions, and healthcare informatics.

## EMPLOYMENT

**Postdoctoral Fellowship in Machine Learning**                              2023.05 - now
Supervisor: Lina Yao
Data61, Commonwealth Scientific and Industrial Research Organisation (CSIRO).

## EDUCATION

**PhD in Computer Science and Engineering**                              2019.10 - 2023.06
Supervisor: Lina Yao
Data Dynamics Group, University of New South Wales.

**Master in Computer Science**                              2016.09 - 2019.06
Supervisor: Chongjun Wang
Intelligent Information Processing Group, Nanjing University.

**Bachelor in Computer Science**                              2012.09 - 2016.06
Department of Computer Science and Technology, Nanjing University.

## PUBLICATIONS AND SUBMISSIONS

**Accepted Paper (First and Co-first Author, * denotes equal contribution)**

1. **Yun Li**, Zhe Liu, Saurav Jha, and Lina Yao. "Distilled Reverse Attention Network for Open-world Compositional Zero-Shot Learning." The 2023 International Conferences on Computer Vision (ICCV-23), Paris France, October 2 - 6 2023 (CORE A*).

2. **Yun Li**, Zhe Liu, Lina Yao, Jessica J.M.Monaghan, and David McAlpine. "Disentangled and Side-aware Unsupervised Domain Adaptation for Cross-dataset Subjective Tinnitus Diagnosis." IEEE Journal of Biomedical and Health Informatics (JBHI, 2023). (IF=7.021, SJR Q1, CORE A*).

3. **Yun Li**, Zhe Liu, Xiaojun Chang, Julian McAuley, and Lina Yao. "Diversity-boosted Generalization-Specialization Balancing for Zero-shot Learning." IEEE Transactions on Multimedia (TMM, 2023). (IF=8.182, SJR Q1, CORE A*).

4. Zhe Liu, **Yun Li***, Lina Yao, and Julian McAuley. "Rethink, Revisit, Revise: Spiral Reinforced Self-Revised Learning for Zero-Shot Learning." IEEE Transactions on Neural Networks and Learning Systems (TNNLS, 2022). (IF=14.255, SJR Q1, Core A*)

5. **Yun Li**, Zhe Liu, Lina Yao, Xianzhi Wang, Julian McAuley, Xiaojun Chang. "An Entropy-Guided Reinforced Partial Convolutional Network for Zero-Shot Learning." IEEE Transactions on Circuits and Systems for Video Technology (TCSVT, 2022). (IF=5.859, SJR Q1)

6. **Yun Li**, Zhe Liu, Lina Yao, Xiaojun Chang. "Attribute-Modulated Generative Meta Learning for Zero-shot Learning." IEEE Transactions on Multimedia (TMM, 2021). (IF=8.182, SJR Q1, CORE A*)

7. Zhe Liu, **Yun Li***, Lina Yao, Xianzhi Wang. "Task Aligned Generative Meta-learning for Zero-shot Learning." The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI, 2021). (CORE: A*)

8. **Yun Li**, Zhe Liu, Lina Yao, Zihuai He. "Non-local Self-attentive Autoencoder for Genetic Functionality Prediction." The 29th International Conference on Information and Knowledge Management, (CIKM 2020). (CORE: A)

9. **Yun Li**, Yixiang Fang, Reynold Cheng, Wenjie Zhang. "Spatial pattern matching: A new direction for finding spatial objects." SIGSPATIAL Special, 2019, 11(1): 3-12.

**Accepted Paper (Co-author)**

1. Zhe Liu, **Yun Li**, Lina Yao, Xiaojun Chang, Wei Fang, Xiaojun Wu, Abdulmotaleb El Saddik. "Simple Primitives with Feasibility- and Contextuality-Dependence for Open-World Compositional Zero-shot Learning." IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI, 2023). (Top journal, IF=24.314, JCR Q1, SJR Q1)

2. Xiaoxin Ye, **Yun Li**, and Lina Yao. "DREAM: Decoupled Representation via Extraction Attention Module and Supervised Contrastive Learning for Cross-Domain Sequential Recommender." The 17th ACM Recommender Systems Conference (RecSys 2023), Singapore Sept. 18 - 22 2023 (CORE B*).

3. Zhe Liu, **Yun Li**, Lina Yao, Molly Lucas, Jessica J.M.Monaghan, and Yu Zhang. "Side-aware Meta Learning for Cross-Dataset Listener Diagnosis with Subjective Tinnitus." IEEE Transactions on Neural Systems and Rehabilitation Engineering (TNSRE, 2022). (IF=4.528, SJR Q1)

4. Xiaocong Chen, **Yun Li**, Lina Yao, Ehsan Adeli, Yu Zhang, Xianzhi Wang. "Generative adversarial U-Net for domain-free few-shot medical diagnosis." Pattern Recognition Letters (PRL, 2021). (IF=5.67, SJR Q1, CORE B)

5. Zhe Liu, Xianzhi Wang, **Yun Li**, Lina Yao, Lei Bai and Ee-Peng Lim. "Face to Purchase: Predicting Consumer Choices with Structured Facial and Behavioral Traits Embedding." Knowledge-based System (KBSYST, 2021) (IF=8.038, JCR Q1, SJR Q1)

6. Zhe Liu, **Yun Li**, Lina Yao, Xianzhi Wang, Feipinng Nie. "Agglomerative Neural Networks for Multi-view Clustering." IEEE Transactions on Neural Networks and Learning Systems (TNNLS, 2021). (IF=14.255, SJR Q1, Core A*)

7. Yixiang Fang, **Yun Li**, Reynold Cheng, Nikos Mamoulis, Gao Cong. "Evaluating Pattern Matching Queries for Spatial Databases." The International Journal on Very Large Data Bases (VLDBJ, 2019). (IF=4.243, SJR Q1, CORE A*)

8. Yixiang Fang, Reynold Cheng, Gao Cong, Nikos Mamoulis, **Yun Li**. "On Spatial Pattern Matching." International Conference on Data Engineering (ICDE, 2018). (CORE A*)

9. Hengyang Lu, **Yun Li**, Chi Tang, Chongjun Wang, Junyuan Xie. "Constructing Pseudo Documents with Semantic Similarity for Short Text Topic Discovery." International Conference on Neural Information Processing (ICONIP, 2018). (CORE A)

10. Hengyang Lu, Gaojian Ge, **Yun Li**, Chongjun Wang, Junyuan Xie. "Exploiting Global Semantic Similarity Biterms for Short-text Topic Discovery."(ICTAI, 2018). (Core B)

11. Hengyang Lu, Ning Kang, **Yun Li,** Qianyi Zhan, Junyuan Xie, Chongjun Wang. " Utilizing Recurrent Neural Network for Topic Discovery in Short Text Scenarios "[J], Intelligent Data Analysis, 2019, 23(2): 259-277. (SJR Q3)

12. Yankai Chen, Yixiang Fang, Reynold Cheng, **Yun Li**, Xiaojun Chen, Jie Zhang. "Exploring Communities in Large Profiled Graphs." IEEE Transactions on Knowledge and Data Engineering (TKDE, 2018). (IF=9.235, SJR Q1, CORE A*)

**Under Review**

1. **Yun Li**, et al. First author with anonymous submission. Submitted to Conference on Computer Vision and

Pattern Recognition, 2024

## SELECTED AWARDS AND HONORS

- Dean's Award for Outstanding PhD Theses (top 10% of PhD theses examined), 2023
- **Google PhD Fellowship in Machine Learning, 2021**, including $15000 in funding
  - **Only 4 PhD student awardees in Australia**
- CIKM student travel grant, 2020
- UNSW Top-up Scholarship, 2020, including $6000 stipend
- University International Postgraduate Award (UIPA), from 2019 to 2023
- The First-Class University Academic Scholarships, Nanjing university, from 2016 to 2019
- The Second-Class University Scholarship, Nanjing University, 2015

## ACADEMIA ACTIVITIES

### Services

- Organisation Committee: ADMA 24 (Sponsorship Chair)
- Journal Reviewer: TOSN, TMM, JBHI, KBSYST, TCSVT, etc.
- Conference Reviewer: AAAI, CIKM, MM, KDD, etc.

### Presentations and Invited Lectures

- "Enhance Trustworthy by Generalizing from a Few Example: a Few-shot Approach for Medical Data", SDM tutorial session, 2023.
- "Generalization and Specialization in Zero-shot Learning.", ACM Multimedia Asia, 2021
- "Non-local Self-attentive Autoencoder for Genetic Functionality Prediction.", CIKM, 2020

### Teaching Experience

- Teaching assistant, Introduction to Java Programming, Nanjing University, fall, 2016.