

EDUCATION	School of Computer Science, University of Sydney	Sydney, Australia
	<i>Ph.D., Computer Science</i>	2023 - 2026 (<i>expected</i>)
	- Advisors: Chang Xu & Daochang Liu - Research area: Uncertainty Calibration, Large (Vision) Language Models	
	School of Computer Science, University of Sydney	Sydney, Australia
	<i>M.Phil., Computer Science</i>	2021 - 2023
	- Advisors: Chang Xu & Lijun chang - Research area: Uncertainty Calibration, Neural Architecture Search	
	School of Computer Science, University of Sydney	Sydney, Australia
	<i>M.E., Data Science</i>	2020 - 2021
	Huazhong University of Science and Technology	Wuhan, China
	<i>B.E., Communication Engineering</i>	2013 - 2017
	Received Science and Technology Scholarship	
EXPERIENCES	Research Intern Apple MLR, Cambridge UK	2026.05 - 2026.10
	- RL post-training for large language models. - Training infrastructure efficiency and reward hacking analysis.	
	Research Intern Google Research, Sydney AU	2025.11 - 2026.02
	Speculative decoding for efficient LLM inference, targeting decoding latency and serving throughput.	
	Teaching Assistant University of Sydney, Sydney	2022 - now
	COMP5329 Deep Learning	Spring 2022, 2023, 2024, 2025
	COMP5318 Machine Learning and Data Mining	Fall 2025
	HTIN5005 Applied Healthcare Data Science	Fall 2022, 2023
	OCMP5329 Deep Learning (Online)	Fall 2024, 2025
	BUSS6002 Data Science in Business	Spring 2024, 2025 Fall 2024, 2025
	QBUS5010 Intro to Dashboarding and Data Visualisation	Fall 2024, 2025
	Construction Supervisor Songjiang Construction Union, Shanghai	2017.07 - 2019.10
	IOS Developer Intern Trip.com, Shanghai	2015.06 - 2015.09
	Frontend Developer Intern Sunallies, Shanghai	2014.06 - 2014.09
AWARDS AND GRANTS	Apple Scholars in AI/ML PhD Fellowship (20 selected worldwide, first Australian recipient), Apple 2026.04 FFT Student Survey Award for Outstanding Achievement in BUSS6002, USYD Business School 2025.12 AAAI 2026 Student Program Committee (3 selected worldwide), AAAI 2025.06 International Tuition Fee Scholarship, USYD 2023.06 Faculty of Engineering Research Support Scholarship, USYD 2023.05 Excellent Student Cadre, HUST, 2015.09 Science and Technology Scholarship, HUST 2014.06	

- PUBLICATIONS
1. Haolan Guo, **Linwei Tao**, Haoyang Luo, Minjing Dong, Chang Xu. Sample Margin-Aware Recalibration of Temperature Scaling. *International Conference on Machine Learning, ICML 2026*.
 2. Xiaoyang Li, **Linwei Tao**, Haohui Lu, Minjing Dong, Junbin Gao, Chang Xu. Calibrating Graph Neural Networks with Wavelet-Aware Temperature Scaling. *International Conference on Learning Representations, ICLR 2026*.
 3. Lei Pan, Zhipeng Lu, Yuan Zheng, Chongyao Yan, Haitao Wen, **Linwei Tao**, Chang Xu. Task-adaptive continual learning of vision language models via prototype routing and prompt. *Neurocomputing*, 2026.
 4. **Linwei Tao**, Yi-Fan Yeh, Minjing Dong, Tao Huang, Philip Torr, Chang Xu. Revisiting Uncertainty Estimation and Calibration of Large Language Models. *Conference on Neural Information Processing Systems, NeurIPS 2025 Scaling Environments for Agents (SEA) Workshop*
 5. Yingqing Yuan, **Linwei Tao**, Haohui Lu, Matloob Khushi, Imran Razzak, Mark Dras, Jian Yang, Usman Naseem. KG-UQ: Knowledge Graph-Based Uncertainty Quantification for Long Text in Large Language Models. *International World Wide Web Conference, WWW 2025 Workshop on Sustainable AI for the Future Web*
 6. Haoyang Luo, **Linwei Tao**, Minjing Dong, Chang Xu. Beyond One-Hot Labels: Semantic Mixing for Model Calibration. *International Conference on Machine Learning, ICML 2025*.
 7. Jinxu Lin, **Linwei Tao**, Minjing Dong, Chang Xu. Uncertainty Weighted Gradients for Model Calibration. *The IEEE / CVF Computer Vision and Pattern Recognition Conference, CVPR 2025*.
 8. Jinxu Lin, **Linwei Tao**, Minjing Dong, Chang Xu. Diffusion Attribution Score: Evaluating Training Data Influence in Diffusion Model. *International Conference on Learning Representations, ICLR 2025*. (Spotlight, 5.1% of 11,500 submissions)
 9. **Linwei Tao**, Minjing Dong, Chang Xu. Feature Clipping for Uncertainty Calibration. *AAAI Conference on Artificial Intelligence, AAAI 2025*.
 10. Lei Pan, Wuyang Luan, Yuan Zheng, Junhui Li, **Linwei Tao**, Chang Xu. GraphFusion: Integrating Multi-Level Semantic Information with Graph Computing for Enhanced 3D Instance Segmentation. *Neurocomputing*, 2024.
 11. **Linwei Tao**, Younan Zhu, Haolan Guo, Minjing Dong, Chang Xu. A Benchmark Study on Calibration. *International Conference on Learning Representations, ICLR 2024*.
 12. **Linwei Tao**, Minjing Dong, Chang Xu. Dual Focal Loss for Calibration. *International Conference on Machine Learning, ICML 2023*.
 13. **Linwei Tao**, Minjing Dong, Daochang Liu, Changming Sun, Chang Xu. Calibrating a Deep Neural Network with Its Predecessors. *International Joint Conference on Artificial Intelligence, IJCAI 2023*.

PREPRINTS

1. **Linwei Tao**, Yi-Fan Yeh, Bo Kai, Minjing Dong, Tao Huang, Tom A. Lamb, Jialin Yu, Philip H.S. Torr, Chang Xu. Can Large Language Models Express Uncertainty Like Human?
2. Younan Zhu, **Linwei Tao**, Minjing Dong, Chang Xu. Attention Calibration for Reducing Hallucination in Large Vision-Language Models.
3. Yunke Wang, **Linwei Tao**, Bo Du, Yutian Lin, Chang Xu. Visual Imitation Learning with Calibrated Contrastive Representation.
4. **Linwei Tao**, Haoyang Luo, Minjing Dong, Chang Xu. Confidence Calibration under Ambiguous Ground Truth. *arXiv:2603.22879*, 2026.
5. **Linwei Tao**, Haolan Guo, Minjing Dong, Chang Xu. Consistency Calibration: Improving Uncertainty Calibration via Consistency among Perturbed Neighbors.
6. Rui Xu, Yunke Wang, **Linwei Tao**, Wenjie Xuan, Yong Luo. Diversifying Personalized Research Ideation against AI-Induced Homogenization. *arXiv:2607.28087*, 2026.

ACADEMIC
SERVICES

Conference Reviewer: *ICML, NeuIPS, ICLR, CVPR, ICCV, AAAI, IJCAI, ACMMM, AISTATS*

Journal Reviewer: *T-MM, TMLR, DAMI, TPAMI, Machine Learning*