Curriculum Vitae

Jiaqi Wen

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Research Interests: Probabilistic ML, Trustworthy AI, AI for Science, Reinforcement Learning, Causality

Education

2025.01-Present	**Ph.D. of Computer Science, University of Houston (USA)** • **Main Courses:** Adv Machine Learning, Intro Automata & Computability, Data Structures, Computer Architecture • **Scholastic Record:** Current average academic major mark 3.8/4
2023.09-2024.11	**Master of Artificial Intelligence (Distinction), University of Aberdeen (UK)** • **Main Courses:** Symbolic AI, Machine Learning, Evaluation of AI System, Applied Artificial Intelligence, Knowledge Representation and Reasoning, Software Agent and Multi-Agent Systems, Data Mining with Deep Learning, Natural Language Generation • **Scholastic Record:** Average academic major mark 21.2/22 (96/100) • **Graduation Status:** Awarded
2020.12-2024.06	**Master of Computer Science (Honours), North China Electric Power University (CN)** • **Main Courses:** Image Understanding, Data Warehouse and Data Mining, Advanced Operating System, Advanced Computer Network, Operations Research, Matrix Theory, Numerical Analysis, Discrete Mathematics • **Scholastic Record:** Average academic major mark 87/100 • **Graduation Status:** Awarded
2014.09-2018.06	**BSc (Honours) in Health Inspection and Quarantine,** **Guangdong Pharmaceutical University (CN)**

Paper

2026	Wen, J., & Yang, J. (2026). ***Distributionally Robust Optimization via Generative Ambiguity Modeling.*** In ICLR 2026.
2025	Wen, J., & Yang, J. (2025). ***Distributionally robust optimization via diffusion ambiguity modeling*****.** In NeruIPS OPT 2025.
2025	Wen, J., Fan, L., & Yang, J. (2026). ***3D-Learning: Diffusion-Augmented Distributionally Robust Decision-Focused Learning*****.** In INFOCOM 2026.
2024	Wen, J., & Amado, L. (2025)**.** ***Goal recognition via variational causality*****.** In AAMAS 2025.
2022	Wen, J. (2022). ***Spectral-Pointer Network: Pre-sort leads the Pointer Network to elude the TSP vortex*****.** In CVIDL & ICCEA 2022.

Research Experience

2025-Present	**Research Assistant** • Involved in projects led by Dr. Jianyi Yang on Generative Distributionally Robust Learning at the University of Houston, focusing on theoretical foundations and practical applications.
2024	**Research Assistant** • Involved in a project led by Prof. Felipe, Dr. Amado on long-term goal Recognition in the University of Aberdeen.
2022	**Integrated and Deep Reinforcement Learning online research seminar** Reinforcement Learning and Graph Neural Networks
2018	**Research Assistant** • Guangdong Rural Cancer Early Diagnosis and Treatment Project for Nasopharyngeal Carcinoma

Employment

2022.09- 2023.09	**Algorithm Engineer, Yuanyu Smart Data (Shenzhen)Technology Co., Ltd** • **December 2022-September 2023** I collaborated with Dr. Yachao Qian, an AI research fellow at the University of Wisconsin-Madison and my direct mentor, on the development of building point cloud measurement and floor plane recognition neural network algorithms for CRLAND. I took independent ownership of the parallel computing development for

these measurement algorithms and spearheaded the creation of the distributed cluster system. The resulting algorithmic system is currently in active use at CRLAND.

- **September 2022 - March 2023**

My primary responsibility involved the development of a segmentation and recognition algorithm tailored for 3D laser point clouds. Throughout this period, I collaborated closely with Prof. Xiaowei Shao from the Centre for Spatial Information Science at the University of Tokyo, focusing on the refinement of algorithms for the segmentation and recognition of architectural point clouds. Under the direct guidance of Prof. Shao, we successfully completed the project, leading to its subsequent commercialization at CRLAND.

2019.07-2022.07

Test Development Engineer, Shenzhen Goodix Technology Co., Ltd.

- **April 2020 - July 2022**

I served as the head of the testing area for the TOF 3DSENSOR project, which created a unified point cloud accuracy evaluation system to measure the quality and consistency of point clouds from different depth cameras or AI algorithms. Additionally, I actively contributed to developing the TOF automated testing system, covering automatic hardware design and data analysis. It's worth noting that I contributed to developing a *Multi-Scale Cascaded Hourglass Neural Network* that converted sparse depth maps into denser representations based on a co-calibrated RGB camera and Goodix's TOF camera, which were applied for sweeper robots and smartphones.

- **January 2020 - March 2020**

As the head of the testing team within the CIS department, my primary role was to oversee the evaluation of output image quality for our in-house designed CMOS image sensors (CIS). I also played a pivotal role in creating an image quality evaluation system.

- **October 2019 - February 2020**

I collaborated with my test leader on the 3D Structured Light Face Recognition project, where my primary focus was enhancing face security. This encompassed researching face attacks and anti-counterfeiting measures. Additionally, I was responsible for developing a face recognition automation system, which resulted in my being awarded a patent for this innovative system. (**Publication Number: 113705275 A**).

- **July 2019 - September 2019**

I was a test engineer responsible for developing mass-production test software for capacitive fingerprint identification modules.

Selected Honours and Awards

2025	**NSM Graduate Student Conference Travel Award,** Scholarship for graduate students to travel to conferences
2023	**Aberdeen Global Scholarship,** Scholarship for taught Postgraduate of Artificial Intelligence.
2018	**The Honor of Outstanding Worker,** for my participation in the Central Grant Chronic Non-communicable Disease Prevention and Control Program, specifically for my contributions to the "Early Diagnosis and Early Treatment of Nasopharyngeal Carcinoma." My responsibilities included conducting epidemiological surveys, providing patient consultation guidance, and engaging in other voluntary services, all contributing to this honor.

Practical Experience

2023-2024	**Membership,** Aberdeen University Artificial Intelligence Society(AUAI) & Aerospace Engineering Society(AES) & Aberdeen University Computing Society(AUCS)
2016-2017	**Leader of the Campus Network Maintenance Team,** Guangdong Pharmaceutical University
2016	**Natural Science Teacher & Team Doctor,** 'Expedition For Love' volunteer teaching activity organized by South China Normal University
2015-2016	**President of the Computer Association,** Guangdong Pharmaceutical University

Computer Skills

- Proficient in development language: Python (Common Library: Pytorch, Tensorflow, Open3d, Networks, Matplotlib, Numpy, CV2, Sklearn, Pandas)
- Proficient in statistical and data visualization software and related languages: MATLAB, SPSS, SAS

Languages

- Chinese (Native Mandarin speaker)
- English (Fluent)