

Suwen JIN

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EDUCATION

Politecnico di Milano

Ph.D., Information Technology

Milan, Italy

Nov 2025 - present

University College Dublin

M.Sc., Computer Science

Dublin, Ireland

Sep 2022 - Jan 2024

Xiamen University Tan Kah Kee College

B.Eng., Environmental Science and Engineering

Xiamen, China

Sep 2018 - Jun 2022

SKILLS SUMMARY

Research Interests: Artificial Intelligence for Complex Systems · Decision-Making under Uncertainty

- **Programming:** Python, SQL, Bash etc.
- **Machine Learning:** PyTorch, scikit-learn, diffusion models.
- **Core Areas:** Inverse Reinforcement Learning (IRL), Sequential Decision Making, Multi-objective Optimization, Spatiotemporal Modeling, Decision Making under Uncertainty
- **Languages:** Chinese (Native), English (C1), Japanese (N2)

PROJECTS

Inverse Reinforcement Learning for Sequential Decision Making under Uncertainty

Politecnico di Milano

Milan, Italy

Nov 2025 - present

- Modeled real-world sequential decision-making using Maximum Entropy IRL
- Integrated multi-objective optimization (BORG/EMODPS) to identify optimal policies under competing objectives

Multimodal Diffusion Model for Spatiotemporal Forecasting

Hong Kong University of Science and Technology

Hong Kong, China

Mar 2025 - July 2025

- Developed diffusion model (U-Net + attention + ConvNeXt) for high-resolution forecasting
- Fused heterogeneous data sources to improve robustness under distribution shift

Spatiotemporal Demand Prediction for Urban Systems

University College Dublin

Dublin, Ireland

Jun 2023 - Aug 2023

- Built ML models (XGBoost, Random Forest) for large-scale demand prediction
- Engineered temporal and contextual features (weather, events, seasonality)

WORK EXPERIENCE

Hong Kong University of Science and Technology, Hong Kong Observatory

Research Assistant

Hong Kong, China

Sep 2024 - Sep 2025

- Developed data-driven modeling systems for high-resolution spatiotemporal prediction; Improved system performance via data integration and model optimization; Collaborated on large-scale real-world data systems

GDS Holdings Ltd.

Large Language Model Intern

Shanghai, China

Jan 2024 - June 2024

- Built RAG-based system for data center knowledge interaction; Fine-tuned LLaMA2 for domain-specific instruction tasks

CONFERENCE

Asia Oceania Geosciences Society AOGS 2026 (Poster)

Multi-Source Verification and Visualization Systems for High-Resolution Regional Reanalysis of High-Impact Weather in the Greater Bay Area

Singapore