

Roubing Tang

Email: roubing.tang@postgrad.manchester.ac.uk

Homepage: <https://trbingwy.github.io/>

Google Scholar; LinkedIn

Summary

I am currently a third-year PhD student, my research primarily focuses on model misspecification, Bayesian experimental design, and simulation-based inference. I am passionate about exploring and developing innovative methods to mitigating the influence of model misspecification.

Education

University of Manchester

PhD, Doctoral Programme in Science

Oct 2023–present

- Supervisors: Prof. Samuel Kaski, Dr. Sabina Sloman and Dr. Michele Caprio.
- Fully funded by European Laboratory for Learning and Intelligent Systems (ELLIS)

Zhejiang Sci-Tech University

MSc, Electronics and Communication Engineering

Sep 2019– June 2022

- Master thesis: Research on Multiple Sources Localization Based on Sparse Bayesian Learning

Zhejiang Sci-Tech University

BSc, Electronics Information Science and Technology

Sep 2015–June 2019

- Bachelor thesis: Research on Multiple Sources Localization Based on Deep Learning

Publications

- **Roubing Tang**, Sabina J Sloman, Ayush Bharti, Samuel Kaski. “Generalization Analysis for Bayesian Optimal Experiment Design under Model Misspecification.” (Under review)
- **Roubing Tang**, Qiaoling Zhang, Weiwei Zhang, Han Ma. “Sparse Bayesian Multiple Sources Localization using Variational Approximation for Laplace Priors” In Digital Signal Processing 2022 (Journal)
- Qiaoling Zhang, Weiwei Zhang, Jie Feng, **Roubing Tang**. ”Distributed acoustic source tracking in noisy and reverberant environments with distributed microphone networks” in IEEE ACCESS 2020 (Journal)

Experience

Doctoral Researcher

University of Manchester & University of Helsinki & Aalto University & Ellis

Oct 2023–Present

- Centre for AI Fundamentals (Manchester), Probabilistic Machine Learning Group (Aalto), Machine and Human Intelligence Group (Helsinki)
- Topic: Bayesian Experiemen Design

Machine Learning Engineer

Witmem Technology, China

Sep 2022 - Jun 2023

- Specialized in Speech Recognition based on Kaldi.

Master Thesis Worker

Zhejiang Sci-Tech University

Sep 2019–June 2022

- Topic: Multiple Sources localization, Variational inference

Skills

- **Languages:** English, Mandarin (native)
- **Programming:** Python, C, MATLAB
- **Data Science / ML:** PyTorch, scipy, numpy, ...

Teaching & Supervision

- Teaching Assistant (DATA70132:Statistics & Machine Learning 2.), University of Manchester Semester B, 2024/25 Academic Year

Events & Talks

- Talk, Bayesian Computation and Inference with Misspecified Models Satellite Workshop in [BayesComp 2025], Singapore (<https://bayescomp2025.sg/>) 16 June,2025
- Talk , Doctoral Symposium, University of Manchester Summer, 2025
- Poster, Doctoral Symposium, University of Manchester Summer, 2024

Awards & Achievements

- European Laboratory for Learning and Intelligent Systems (ELLIS) (100% tuition waiver) 2023
- Awarded National Scholarship (8 out of 249), Zhejiang Sci-Tech University
- Awarded Outstanding Graduates (top 15%), Zhejiang Sci-Tech University June 2022
- Awarded Scholarship for Outstanding Students (top 10%), Zhejiang Sci-Tech University Sep 2019– June 2022
- Awarded Outstanding Graduates (top 15%), Zhejiang Sci-Tech University June 2019
- Awarded Scholarship for Outstanding Students (top 10%), Zhejiang Sci-Tech University Sep 2015–June 2019