

# Roubing Tang

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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 Experiment 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

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

## Events & Talks

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- 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

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- 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