NING ZHANG ■ zhangningnku@gmail.com

# Education

#### **DPhil in Computational Discovery, University of Oxford** Specialized in Fundamental Methodologies for Machine Learning

MASc in ECE, University of British Columbia GPA: 93.8/100; Thesis topic: statistical estimation for graph alignment

BSc in Physics (Honor), Nankai University GPA: 90.8/100; Ranking: 3/92; Thesis topic: statistical physics inspired image analysis

# **Research Interest**

graph theory, spectral methods, applied probability, algorithms, applied statistics, optimization, statistical physics

#### Publications (\*corresponding author)

- 1. Mihai Cucuringu, Xiaowen Dong, and **Ning Zhang\***. Maximum likelihood estimation on stochastic blockmodels for directed graph clustering, 2024
- 2. Ziao Wang, **Ning Zhang**, Weina Wang, and Lele Wang. On the feasible region of efficient algorithms for attributed graph alignment. In *IEEE Transactions on Information Theory*, 2024
- 3. Zhang, Ning, Ziao Wang, Weina Wang, and Lele Wang. Attributed graph alignment. *IEEE Transactions on Information Theory*, 2024
- Zhang, Ning, Susan Francis, Rayaz A Malik, and Xin Chen. A spatially constrained deep convolutional neural network for nerve fiber segmentation in corneal confocal microscopic images using inaccurate annotations. In 2020 IEEE 17th International Symposium on Biomedical Imaging (ISBI), pages 456–460. IEEE, 2020

### Awards

- 2023-2027 DPhil Scholarship from EPSRC and IBM
- 2021 IEEE North American School of Information Theory Best Poster Award
- 2020 Honourable Mention in Graph Attack and Defence Track of KDD Cup (rank 14/106)
- 2019 Outstanding Graduate in Nankai University (top 3%)
- 2017 Gong Neng Award (top 10%)
- 2016 & 2018 The Second & First Prize Scholarship for Outstanding Student (top 5%,10%)
- 2015-2019 Poling Scholarship (National Top-talent Students Training Program)

### Working Experience

Microsoft Research Asia Research Intern, Advisor: Haoyu Dong Statistical methods for robust computation using GPT.

### Teaching

- MT 2023, Probability and Statistics for Network Analysis
- Fall 2021 Fall 2020, Stochastic Signals and Systems (STAT321)
- Spring 2020, Electrical Engineering Design Studio I (ELEC291)

Jan 2023 – Current Oxford, England

Sep 2019 – Apr 2022 Vancouver, Canada

Sep 2015 – Jun 2019 Tianjin, China

Oct 2022 – Feb 2023 Beijing, China

# Talks and Activities

2024	Graph Signal Processing Workshop, Delft, Netherlands
2023	International Conference on Complex Networks and their Applications, Menton, France
2021	IEEE International Symposium on Information Theory (ISIT) $@$ IEEE North American School of Information Theory (NASIT) $@$
2020	IEEE International Symposium on Biomedical Imaging (ISBI) ${\ensuremath{ @}}$

## **Relavent Skills**

Language: Chinese (native), English (fluent)

Coding languages: MATLAB, Python, Mathematica, C++

Technologies/Frameworks: Linux, Github