NING ZHANG

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Education

DPhil in Computational Discovery, University of Oxford   **Oct 2022 – Current**
Specialized in Fundamental Methodologies for Machine Learning   *Oxford, England*

MASc in ECE, University of British Columbia   **Sep 2019 – Apr 2022**
GPA: 93.8/100   *Vancouver, Canada*

Research Topic: Attributed graph alignment: information-theoretic limits and efficient algorithms

BSc in Physics, Nankai University   **Sep 2015 – Jun 2019**
GPA: 90.8/100   Ranking: 3/92 (3/15 in Poling class)   *Tianjin, China*

Research Interest

graph theory, probability theory, algorithms, statistics, machine learning theory, optimization, spectral methods, operations research, statistical physics

Publications

1 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*, 2022 [arXiv]

2 **Zhang, Ning**, Weina Wang, and Lele Wang. Attributed graph alignment. In *2021 IEEE International Symposium on Information Theory (ISIT)*, pages 1829–1834, 2021 [Conference paper] [Full version]

3 Xin Zhou, Sina Maloufi, Daniel C. Louie, **Ning Zhang**, Qihao Liu, Tim K. Lee, and Shuo Tang. Investigating the depolarization property of skin tissue by degree of polarization uniformity contrast using polarization-sensitive optical coherence tomography. *Biomed. Opt. Express*, 12(8):5073–5088, Aug 2021

4 **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 [Conference paper] [Code]

Awards

2022-2026	DPhil Scholarship from EPSRC and IBM
2021	IEEE North American School of Information Theory Best Poster Award (second prize, 2/50)
2020	Honorable Mention in Graph Attack and Defence Track of KDD Cup (Rank 14/106)
2019	Outstanding Graduate in Nankai University (top 3%)
2018	The First Prize Scholarship for Outstanding Student (top 5%)
2017	Gong Neng Award (top 10%)
2016	The Second Prize Scholarship for Outstanding Student (top 10%)
2015-2019	Poling Scholarship (National Top-talent Students Training Program)

Teaching

Fall 2021	Teaching assistant for STAT321 Stochastic Signals and Systems
Spring 2021	Teaching assistant for STAT321 Stochastic Signals and Systems
Fall 2020	Teaching assistant for STAT321 Stochastic Signals and Systems
Spring 2020	Lab assistant for ELEC291 Electrical Engineering Design Studio I

Talks and Activities

2022	International Conference on Complex Networks and their Applications, Menton, France
2021	IEEE International Symposium on Information Theory (ISIT) [Slides]
	IEEE North American School of Information Theory (NASIT) [Poster]
	UBC statistical learning theory reading group [Note1][Note2]
	Existing graph alignment algorithm demos [Slides]
2020	IEEE International Symposium on Biomedical Imaging (ISBI)[Slides]
	UBC graph statistics reading group [Note]

Relavent Skills

Language: Chinese(native), English(fluent)

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

Technologies/Frameworks: Linux, Github