Hui Shen

Contact Information

McGill University, Department of Mathematics and Statistics
Room 1216, Burnside Hall, 805 Sherbrooke Street West, Montreal, Quebec H3A 0B9
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Employee History

Postdoctoral Researcher **Sep 2023 - Present**
McGill University, Department of Mathematics and Statistics
Montreal, Quebec
Advisors: Eric D. Kolaczyk
Research direction: uncertainty quantification in networks

Education

The University of North Carolina **Aug 2023**
Chapel Hill, North Carolina
Ph.D. Statistics
Advisors: Yufeng Liu, Shankar Bhamidi
Thesis Title: Consistency of Statistical Learning Techniques: Unsupervised Learning and Network Change Point

Shanghai University of Finance and Economics **June 2018**
Shanghai, China
B.S. Statisitcs
Advisors: Xingdong Feng

Research Interests

Network analysis, Change point detection, Statistical machine learning, Graph representation learning, Dimension Reduction.

Papers

Published

1 **Shen, H.**, Bhamidi, S., and Liu, Y. "Statistical Significance of Clustering with Multidimensional Scaling." (Accept at *Journal of Computational and Graphical Statistics*)

Preprint

1 **Shen, H.***, Patel, D.*, Bhamidi, S., Liu, Y., and Pipiras, V. "Consistency of Lloyd's Algorithm Under Perturbations." (2023)

2 **Shen, H.** "Consistency of Statistical Learning Techniques: Unsupervised Learning and Network Change Point." (2023)

Teaching Experience

STOR 115 Introduction to Data Models and Inference **2021.8 - 2021.12**
UNC-CH
- Instructor

STOR 445 Stochastic Modeling **2020**
STOR 455 Methods of Data Analysis **2019, 2022**
STOR 555 Mathematical Statistics **2018, 2020**
STOR 634 Measure and Integration (graduate level) **2019**
UNC-CH

- Teaching Assistant

Mentoring Experience

Mentor for Ph.D. qualifying exams in UNC, STOR **2022 Summer**

Honors and Awards

Cambanis-Hoeffding-Nicholson Award, *UNC-CH STOR* **Dec 2019**
- In recognition of superior academic performance in the first-year doctoral program

Professional Activities

- Reviewer, Journal of Multivariate Analysis (2022, 2023)
- **Memberships**: American Statistical Association.

Software

R, Python, Matlab, SAS, C++.

Professional Experience

Cardinal Operations **2018.5**
Shanghai, China
- Develop machine learning algorithms for facility location

References

Eric D. Kolaczyk
Professor
Statistics
McGill University
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Shankar Bhamidi
Professor
Probability and Statistics
The University of North Carolina at Chapel Hill
Email: **bhamidi@email.unc.edu**

Yufeng Liu
Professor
Statistics
The University of North Carolina at Chapel Hill
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