Zhaoqi Li

(612) 309-8148   zli9@uw.edu   https://zhaoqil.github.io

RESEARCH INTEREST

Multi-armed bandits, adaptive experimentation, active learning

EDUCATION AND SKILLS

UNIVERSITY OF WASHINGTON, SEATTLE, WA   *2018 – Present*
Doctor of Philosophy in Statistics

MACALESTER COLLEGE, SAINT PAUL, MN   *2014 – 2018*
Bachelor of Arts, Mathematics and Computer Science
Summa Cum Laude, GPA 3.98/4.00
Department Honor prize: Konhauser Achievement Prize, Wagon Competition Prize

TECHNICAL SKILLS
Programming Languages: Proficient in Python, Java, R, Matlab, Mathematica. Familiar with C++
Operating Systems: Proficient in Linux

PUBLICATIONS

- **Z. Li**, L. Ratliff, H. Nassif, K. Jamieson, L. Jain. Instance-optimal PAC algorithms for contextual bandits. arXiv preprint arXiv:2207.02357, 2022.
- J. A. Rathe, E. A. Hemann, J. Eggenberger, **Z. Li,** M. L. Knoll, C. Stokes, T. Y. Hsiang, J. Netland, K. K. Takehara, M. Pepper, M. Gale Jr (2021). SARS-CoV-2 Serologic Assays in Control and Unknown Populations Demonstrate the Necessity of Virus Neutralization Testing. *The Journal of infectious diseases*, 223(7), 1120–1131.
- B. Anzis, S. Chen, Y. Gao, J. Kim, **Z. Li,** R. Patrias (2018). Jacobi-Trudi determinants over finite fields. *Annals of Combinatorics*, 22(3), 447-489.
- **Z. Li**, Y. Ma, C. Vajiac, Y. Zhang, "Exploration of Numerical Precision in Deep Neural Networks", (2018), arXiv:1805.01078 [stat.ML].
- Y. Gao, **Z. Li**, T. Vuong, L. Yang (2018). Toric Mutations in the dP2 Quiver and Subgraphs of the dP2 Brane Tiling. *The Electronic Journal of Combinatorics,* 26(2), P2-19.

TEACHING EXPERIENCE

TEACHING ASSISTANT   **Seattle, WA**
Department of Statistics, University of Washington   *September 2018 - Present*
Department of Mathematics, Statistics, And Computer Science, Macalester College   *September 2015 - May 2018*
- Teach weekly quiz section
- Prepare materials for lectures and test questions
- Hold weekly office hours and grade weekly homework
- Maintain webpage for course materials and help with in-class discussion
- Have assisted with more than 10 classes covering mathematics, statistics, and computer science

LEAD TUTOR   **Seattle, WA**

Department of Statistics, University of Washington   *September 2020 - September 2021*

- Assist Director of the Statistics Tutor and Study Center
- Point of contact for tutoring requests and forward requests to Statistics graduate students via statgrads listserve
- Responsible for hiring new tutors and providing TA and tutor training
- Organize the quarterly schedule of tutors for the Statistics Tutor and Study Center

STUDENT MENTOR   **Seattle, WA**

Department of Statistics, University of Washington   *January 2020 - December 2020*

- Mentor undergraduate students in the Directed Reading Program
- Prepare reading materials and host meetings each week
- Help the student prepare their final presentation and write-up

TUTOR   **Seattle, WA**

Department of Statistics, University of Washington   *September 2019 - June 2020*

- Host drop-in tutoring sessions in the Statistics Tutor and Study Center
- Help other tutors answer questions from 400-level and graduate classes
- Host online appointments when classes are not in-person

WORK EXPERIENCE

APPLIED SCIENTIST INTERN   **Seattle, WA**

Amazon Inc.   *June – September 2020, June – September 2021*

Project 1: Adaptive Experimental Design for Time Variation

- Conducted real data analysis to demonstrate the existence of time variation phenomenon in real life
- Implemented bandit algorithms robust to time variation to help with auto decision making

Project 2: Structured Multivariate Testing

- Implemented graph optimization algorithms that improves the current framework in multivariate testing use case
- Conducted simulation analysis to study performance of the algorithm in different cases

RESEARCH ASSISTANT   **Seattle, WA**

Department of Statistics, University of Washington   *September 2019 – June 2020*

- Did a project on Kernel Methods in Machine Learning with Professor Zaid Harchaoui and Professor Ali Shojaie
- Derive kernel methods to perform nonlinear regression and inference on structured data and network data
- Showed an error bound for the Kernel Projection Machine algorithm with the optimal choice of dimensionality

LEADERSHIP EXPERIENCE AND SERVICE

MATHEMATICAL PROBLEM SOLVING CLUB, MACALESTER COLLEGE

Co-chair   January 2017 – May 2018

- Organize a weekly meeting on mathematical problem solving
- Prepare interesting mathematics problems and presentations on famous mathematicians

CHINESE CULTURE CLUB, MACALESTER COLLEGE

Board Member and Representative   September 2015 – May 2018

- Organize a bi-weekly multi-language Karaoke and game night event and design puzzles for the escape room
- Attend weekly board meeting to discuss and help with relevant events

OTHER SERVICE

- Reviewing applications for the department of statistics at the University of Washington
- Reviewer of Neurips 2022, AISTATS 2022