Alex DiChristofano

<u>alexdc.info</u> • <u>a.dichristofano@gmail.com</u>

EDUCATION

Washington University in St. Louis, St. Louis, MO

Ph.D. in Computational & Data Sciences; Social Work and Public Health Track

• GPA: 3.80/4.00, Advised by Patrick Fowler and Chien-Ju Ho

Washington University in St. Louis, St. Louis, MO

B.A. in Mathematics, Second Major in Computer Science

• GPA: 3.91/4.00, Graduated with Honors

PREPRINTS

Thibodeau, H., **DiChristofano, A.**, Howerton, I., Das, S., Luke, D. A., Fowler, P. J. 2024. Eviction Markets: Owner-Attorney Networks Underlying Tenant Displacement. *Under Review*.

Farrell, D. C., Fowler, P. J., Parulkar, A., **DiChristofano, A.**, Goodrich, T., Mott, S., Silverman, R., Manglik, S. 2024. Addressing Risks and Reducing Homelessness of Vulnerable Parenting Youths: An Implementation and Impact Evaluation of HELP USA's New Beginnings Program. *Under Review*.

DiChristofano, A., Hamilton, M. L., Hao, Q., Linardi, S. 2024. Platform Design with Prosocial Participants: Lessons from 412Connect. *Under Review*. [link]

Sarkar, A.*, **DiChristofano, A.***, Das, S., Fowler, P. J., Jacobs, N., Vorobeychik, Y. 2024 Geospatial Active Search for Preventing Evictions. *Under Review*.

DiChristofano, A., Shuster, H., Chandra S., Patwari, N. 2023. Performance Disparities Between Accents in Automatic Speech Recognition. *arXiv*. [link]

CONFERENCE & JOURNAL PUBLICATIONS

Mashiat, T., **DiChristofano, A.**, Fowler, P. J., Das, S. 2024. Beyond Eviction Prevention: Leveraging Local Spatiotemporal Public Records to Inform Action. *FAccT '24: ACM Conference on Fairness, Accountability, and Transparency*. [link]

Sarkar, A.*, **DiChristofano**, **A.***, Das, S., Fowler, P. J., Jacobs, N., Vorobeychik, Y. 2024. Geospatial Active Search for Preventing Evictions (Extended Abstract). *AAMAS '24: International Conference on Autonomous Agents and Multiagent Systems*. [link, pdf]

DiChristofano, A., Shuster, H., Chandra S., Patwari, N. 2023. Performance Disparities Between Accents in Automatic Speech Recognition (Student Abstract). *AAAI '23: AAAI Conference on Artificial Intelligence*. [link]

- Student Abstract Finalist, Selected for Presentation

DiChristofano, A., Hamilton, M. L., Linardi, S., McCloud, M. F. 2021. Project 412Connect: Bridging Students and Communities. *EAAMO '21: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization*. [link]
 28% Acceptance Rate, New Horizons Award for Bridging Research and Practice

Chung, M. K., Lee, H., **DiChristofano**, A., Ombao, H., Solo, V. 2019. Exact Topological Inference of the Resting-State Brain Networks in Twins. *Network Neuroscience*. [link]

* denotes equal contribution

CONFERENCE PRESENTATIONS & INVITED TALKS

Performance Disparities Between Accents in Automatic Speech Recognition

- AAAI-23 Student Abstract and Poster Program. (2023)

Project 412Connect: Bridging Students and Communities

- 2023 INFORMS Annual Meeting. (Invited Talk, 2023)
- 2022 INFORMS Annual Meeting. (Invited Talk, 2022)

2020 - Present

2016 - 2020

- Year of Data and Society, University of Pittsburgh. (Invited Talk, 2021) *
- EAAMO' 21: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization. (2021)

Grief to Action: Collaborative Efforts Between Researchers and Communities

- Global Perspectives on Inequality Working Group, EAAMO Bridges (Formerly MD4SG). (Invited Talk, 2022) *

Confronting Homelessness Through Critical Time Interventions

- Conference, National Association of Social Workers New York City Chapter. (Invited Talk, 2021) *
- Rising Stars Workshop, Harvard Center for Research on Computation and Society. (Invited Talk, 2020)
- 12th Annual Institute for Public Health Conference, Washington University in St. Louis. (2019)

* presented with collaborators

GRANTS AND FELLOWSHIPS

| Department of Statistics, Biostatistics, and Medical Informatics, University of Wisconsin-Madison Research Assistant PROFESSIONAL EXPERIENCE | |
|---|----------------|
| Department of Statistics, Biostatistics, and Medical Informatics, University of Wisconsin-Madison | York City. |
| | York City. |
| Collaborated with volunteers and community stakeholders to design and lead the implementation or platform which connects university students and local Black-owned businesses. Applied causal inference methods to analyze the implementation of a housing intervention in New 1 | |
| Audited commercial automated speech recognition APIs using a dataset of accents from speakers a | |
| Estimated the effect of 311 calls leading to property inspections on eviction in St. Louis. | |
| Applied geospatial active search to simulations of eviction discovery in St. Louis. Predicted evictions at the parcel-level in St. Louis using municipal spatiotemporal records. | |
| Research Assistant | |
| Division of Computational & Data Sciences, Washington University in St. Louis | 2020 - Present |
| RESEARCH EXPERIENCE | |
| Dean's List, Washington University in St. Louis | 2016 - 2018 |
| New Horizons Award for Bridging Research and Practice, <i>EAAMO '21</i> | 2021 |
| Honorable Mention, NSF Graduate Research Fellowship Program (GRFP) | 2022 |
| AWARDS | |
| Summer Research Opportunities Program, University of Wisconsin-Madison | 2018 |
| Dean's Select Doctoral Fellowship, Washington University in St. Louis | 2020 - 2021 |
| Engaged Scholarship Summer Design Fellow, University of Pittsburgh | 2021 |
| Seed Grant, <i>Transdisciplinary Institute in Applied Data Sciences</i> , <i>Washington University in St. Louis</i> Small Grant, <i>Center for the Study of Race, Ethnicity, & Equity, Washington University in St. Louis</i> | 2024 2023 |

| Business Analytics Intern | |
|--|-------------|
| • Split time between two teams, one in data and automation and the other in quality assurance. | |
| • Developed automated data analysis and quality assurance processes within established workflows. | |
| • Learned Tableau and Power BI to create the best solution for each team. | |
| • Deployed and documented projects before the completion of the internship. | |
| TEACHING Assistant to the Instructor | |
| Department of Computer Science and Engineering, Washington University in St. Louis, St. Louis, MO | |
| Introduction to Graduate Research in Computational and Data Sciences (DCDS 499) Created and led final project and gave lectures | Spring 2023 |
| • Signals, Data, and Equity (CSE 359A / ESE 359) | Fall 2021 |

| | • Assisted in course development and gave lectures | |
|---|---|-----------|
| • | Multi-Agent Systems (CSE 516A) | Fall 2019 |
| | $C_{\text{commutational}} C_{\text{commutational}} (CSE 54(T))$ | E-11 2010 |

Computational Geometry (CSE 546T)
Data Structures and Algorithms (CSE 247)
Spring 2019

PROFESSIONAL SERVICE AND ACTIVITIES

| Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO) Leadership | |
|--|----------------|
| Non-Academic Dissemination Lead | 2024 - Present |
| Nonprofit Incorporation and Fiscal Sponsorship Team | 2024 |
| Social Media Team | 2021 - 2023 |
| Working Group Member | |
| Urban Data Science, EAAMO Bridges | 2021 - Present |
| Global Perspectives on Inequality, EAAMO Bridges | 2021 - Present |
| Social Media Co-Chair | |
| • EAAMO '23: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization | 2023 |
| • EAAMO '22: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization | 2022 |
| • EAAMO '21: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization | 2021 |
| Program Committee | |
| • EAAMO '24: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization | 2024 |
| AASG '24: International Workshop on Autonomous Agents for Social Good | 2024 |
| Conference Volunteer | |
| • FAccT '22: ACM Conference on Fairness, Accountability, and Transparency | 2022 |