

Alex DiChristofano

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EDUCATION

Washington University in St. Louis, St. Louis, MO 2020 – Present

Ph.D. in Computational & Data Sciences

- GPA: 3.83/4.00, Advised by Patrick Fowler

Washington University in St. Louis, St. Louis, MO 2016 - 2020

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

- GPA: 3.91/4.00, Graduated with Honors

PUBLICATIONS

DiChristofano, A., Shuster, H., Chandra S., Patwari, N. 2022. Performance Disparities Between Accents in Automatic Speech Recognition. *To appear in AAAI-23 Student Abstract and Poster Program*. [\[link\]](#)

- 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*. [\[link\]](#)

CONFERENCE PRESENTATIONS

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*.

INVITED TALKS AND POSTERS

DiChristofano, A., Hamilton, M. L., Linardi, S., McCloud, M. F. 2022. Project 412Connect: Bridging Students and Communities. *2022 INFORMS Annual Meeting*. (Invited Talk)

DiChristofano, A., Rial, E., Stapleton, L. 2022. Grief to Action: Collaborative Efforts Between Researchers and Communities. *Global Perspectives on Inequality Working Group, MD4SG*. (Invited Talk)

Linardi, S., **DiChristofano, A.**, Chang, I., Griffin, C., Olin, T., Gerard, A. 2021. Project 412Connect: Bridging Students and Underrepresented Communities. *Year of Data and Society, University of Pittsburgh*. (Invited Talk)

Goodrich, T., Farrell, D., **DiChristofano, A.** 2021. Homebase and New Beginnings Homeless Prevention Programs. *Conference, National Association of Social Workers - New York City Chapter*. (Invited Talk)

DiChristofano, A., Fowler, P., Farrell, D. 2020. Confronting Homelessness Through Critical Time Interventions. *Rising Stars Workshop, Harvard Center for Research on Computation and Society*. (Invited Talk)

DiChristofano, A., Fowler, P., Farrell, D. 2019. Confronting Homelessness Through Critical Time Interventions. *12th Annual Institute for Public Health Conference, Institute for Public Health, Washington University in St. Louis*. (Poster)

TEACHING

Assistant to the Instructor

Department of Computer Science and Engineering, Washington University in St. Louis, St. Louis, MO

- Signals, Data, and Equity (CSE 359A / ESE 359) Fall 2021
 - Assisted in course development and gave lectures
- Multi-Agent Systems (CSE 516A) Fall 2019
- Computational Geometry (CSE 546T) Fall 2019
- Data Structures and Algorithms (CSE 247) Spring 2019

GRANTS AND FELLOWSHIPS

Engaged Scholarship Summer Design Fellow, University of Pittsburgh	2021
Dean's Select Doctoral Fellowship, Washington University in St. Louis	2020-2021
Summer Research Opportunities Program, University of Wisconsin-Madison	2018

AWARDS

Honorable Mention, NSF Graduate Research Fellowship Program (GRFP)	2022
New Horizons Award for Bridging Research and Practice, EAAMO '21	2021
Dean's List, Washington University in St. Louis	2016 - 2018

PROFESSIONAL SERVICE AND ACTIVITIES

Social Media Team <i>Mechanism Design for Social Good (MD4SG)</i>	2021 – Present
Member, Global Perspectives on Inequality Working Group <i>Mechanism Design for Social Good (MD4SG)</i>	2021 – Present
Social Media Co-Chair <i>EAAMO'22: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization</i>	2022
Volunteer <i>FaccT'22: ACM Conference on Fairness, Accountability, and Transparency</i>	2022
Social Media Co-Chair <i>EAAMO'21: ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization</i>	2021

RESEARCH EXPERIENCE

Research Assistant <i>Division of Computational & Data Sciences, Washington University in St. Louis, St. Louis, MO</i>	2020 – Present
<ul style="list-style-type: none">• Predicted evictions at the parcel-level in St. Louis using historical data from governmental sources.• Analyzed the fairness implications of and designed mechanisms for the allocation of services to unhoused populations. Specifically considered the case when households may drop-out after referral.• Audited commercial automated speech recognition APIs using a dataset of accents from speakers around the world.• Collaborated with volunteers and community stakeholders to design and lead the implementation of an online platform which connects university students and local Black-owned businesses.• Applied causal inference methods to analyze the implementation of a housing intervention in New York City.	
Research Assistant <i>Brown School, Washington University in St. Louis, St. Louis, MO</i>	2019 – 2020
<ul style="list-style-type: none">• Advised by Patrick Fowler, Associate Professor at the Brown School• Evaluated the effectiveness of critical time interventions for young adult heads of household• Applied statistical methods to understand program success and failure• Created presentation for the European Research Conference• Presented at Washington University Institute for Public Health's Annual Conference	
Research Assistant <i>Department of Statistics, Biostatistics, and Medical Informatics, University of Wisconsin-Madison, Madison, WI</i>	Summer 2018
<ul style="list-style-type: none">• Advised by Moo K. Chung, Associate Professor at the University of Wisconsin-Madison• Investigated the function brain networks of twins using an fMRI dataset• Extended power for statistical inference by showing the Betti-1 number is monotonic over graph filtration• Applied a new methodology to distinguish between the resting-state brain networks of mono and dizygotic twins• Coauthored a paper in <i>Network Neuroscience</i>, and was acknowledged on a conference paper in <i>IEEE ISBI</i>	