

Alex DiChristofano

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EDUCATION

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

2020 – Present

Doctor of Philosophy

- Computational and Data Sciences
- Specialization in Public Health
- Primary Advisor: Patrick Fowler
- GPA: 3.95/4.00

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

2020

Bachelor of Arts

- Mathematics with Second Major in Computer Science
- Graduated with Honors
- GPA: 3.91/4.00

PUBLICATIONS

DiChristofano, A., Hamilton, M. L., Linardi, S., & McCloud, M. F. 2021. Project 412Connect: Bridging Students and Communities. *In Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'21)*.

<https://doi.org/10.1145/3465416.3483304>

- 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*. https://doi.org/10.1162/netn_a_00091

ORAL PRESENTATIONS

DiChristofano, A., Hamilton, M. L., Linardi, S., & McCloud, M. F. 2021. Project 412Connect: Bridging Students and Communities. *In Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'21)*.

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*.

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

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

DiChristofano, A., Gritsenko, A., & Chung, M. K. 2018. Twin Functional Brain Network Modeling via Persistent Homology. *Summer Research Opportunities Program, University of Wisconsin-Madison*.

POSTER PRESENTATIONS

DiChristofano, A., Fowler, P., & Farrell, D. 2019. Confronting Homelessness Through Critical Time Interventions. *Poster Presentation as part of the 12th Annual Institute for Public Health Conference, Institute for Public Health, Washington University in St. Louis*.

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

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 Co-Chair 2021
1st ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '21)

Medium Blog Co-Manager 2021 – Present
Mechanism Design for Social Good (MD4SG)

Member, Working Group on Global Perspectives on Inequality 2021 – Present
Mechanism Design for Social Good (MD4SG)

RESEARCH EXPERIENCE

Research Assistant 2019 – 2020
Brown School, Washington University in St. Louis, St. Louis, MO

- 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 Summer 2018
Department of Statistics, Biostatistics, and Medical Informatics, University of Wisconsin-Madison, Madison, WI

- 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 *Network Neuroscience*, and was acknowledged on a conference paper in *IEEE ISBI*