Anthony DiGiovanni

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EDUCATION

University of Michigan-Ann Arbor   Ann Arbor, MI
Ph.D. Statistics   *Expected May 2024*
Relevant Coursework: Linear Models, Statistical Inference, Computation and Optimization Methods in Statistics, Analysis of Multivariate and Categorical Data

The University of Chicago   Chicago, IL
B.S. Computational and Applied Mathematics   *2019*
GPA: 3.83
Relevant Coursework: Introduction to Theory of Machine Learning, Fundamentals of Deep Learning, Optimization, Linear Algebra, Stochastic Processes, Theory of Algorithms

PAPERS

• DiGiovanni, A., Demanelis, K., Tong, L., Argos, M., Shinkle, J., Jasmine, F., Sabarinathan, M., Rakibuz-Zaman, M., Sarwar, G., Islam, M. T., Shahriar, H., Islam, T., Rahman, M., Yunus, M., Graziano, J., Gamble, M. V., Ahsan, H., Pierce, B. L. (2020) "Assessing the impact of arsenic metabolism efficiency on DNA methylation using Mendelian randomization," *Environmental Epidemiology*, 4 (2), e083.

EXPERIENCE

Wild Animal Initiative   New York, NY
Research Intern   *June 2019 – August 2019*
• Developed equations and implementations for matrix population models in Python, for the analysis of predator-prey dynamics, density-dependent growth, and changes in age structure.
• Debugged scripts for querying the COMADRE animal demography database.
• Wrote a comprehensive user guide and demonstration/methods section explaining the advantages of a new matrix population model framework, including greater biological realism and utility for quantifying the changes in animal welfare over life history.

The University of Chicago   Chicago, IL
Research Fellow   *June 2018 – June 2019*
• Wrote R scripts for the processing and organization of public health data, as well as statistical analyses such as multivariate regression, causal inference tests, mediation analysis, gene-environment interaction analysis, and Mendelian randomization.
• Developed machine learning models in Python and R for the prediction of aging outcomes based on biomarkers.
• Reviewed literature in epidemiology, genomics, and statistics to assist data interpretation and methodology.
• Wrote and edited a scientific manuscript for publication as a first author.

CollegeVine   Cambridge, MA
Associate Hiring Manager   *March 2018 – December 2018*
• Evaluated applicants' writing samples and edits of college admissions essays to facilitate hiring decisions for applications consultants.
• Contributed to development of improved hiring policy and procedures.

CollegeVine   Cambridge, MA
Applications Consultant   *July 2017 – February 2018*
• Helped clients develop a list of colleges and universities to which they applied, personalized to their interests and strengths, and prepared clients for admissions interviews.
• Guided clients' ideation of application essays, and edited essays for content, structure, style, and grammar.

• Assisted development of extracurricular lists and resumes that optimally displayed clients' strengths.
• Wrote blog posts to provide admissions information to prospective clients.

TEACHING

University of Michigan-Ann Arbor   Ann Arbor, MI
Graduate Student Instructor   *September 2019 – present*
• STATS 280: Honors Introduction to Statistics & Data Analysis
• STATS 250: Introduction to Statistics & Data Analysis

The University of Chicago   Chicago, IL
Teaching Assistant   *January 2018 – March 2018*
• MATH 13200: Elementary Functions and Calculus II

LEADERSHIP

• Co-president of Effective Altruism chapter at the University of Chicago *(October 2017 – June 2019)*
• Treasurer and Secretary of Phoenix Survivors Alliance student group at the University of Chicago
(September 2016 – June 2019)