Jimmy Hickey

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Education

2019-present — Ph.D. Statistics
North Carolina State University

2019 - 2020 — M.S. Statistics
North Carolina State University

2014 - 2018 — B.S. Computer Science; B.S. Physics; B.A. Mathematics
Winona State University
Minors: Statistics; Data Science
GPA: 4.0

Professional Experience

2020 - present — Statistical Sciences Technical Intern
Sandia National Laboratories

- Apply statistical methods in spatial statistics, functional data analysis, and machine learning
- Support a variety of applications including environmental science, engineering, and national defense

2019 - present — Graduate Student Researcher
Duke Clinical Research Institute

- Research new methods to improve stroke risk prediction
- Develop transfer and federated learning methods to address racial disparity in event prediction

2018 - 2019 — Genomic Systems Programmer Analyst
Mayo Clinic

- Develop variant annotation, microbiome, and multiple myeloma fusion detection pipelines for researchers and clinicians
- Create a general unit testing framework for all pipelines

2016 - 2021 — Peer Tutor

- Tutor a master's student in mathematical statistics
- Tutor undergraduates in physics, computer science, and math

2016 - 2018 — Software Developer
Digi International

- Build firmware for microcontrollers and routing devices

Publications

1. **J Hickey**, J P Williams, E C Hector (2022+). Transfer Learning with Uncertainty Quantification: Random Effect Calibration of Source to Target (RECaST). [arXiv] *In Review*
2. C Hong, M Liu, D M Wojdyla, **J Hickey**, M Pencina, R Henao (2023+). Trans-Balance: Reducing Demographic Disparity for Prediction Models in the Presence of Class Imbalance. *In Review*
3. **J Hickey**, R Henao, M Pencina, D M Wojdyla, M Engelhard (2023+). Improving Event Time Prediction by Learning to Partition the Timeline. *In Review*

Professional Presentations

1. Transfer Learning with Uncertainty Quantification: Random Effect Calibration of Source to Target (RECaST). *Joint Statistical Meeting Oral Presentation*. August 2023
2. Transfer Learning with Uncertainty Quantification: Random Effect Calibration of Source to Target (RECaST). *North Carolina State University Graduate Research Symposium Poster Presentation*. April 2023
3. Trans-Balance: Reducing Demographic Disparity for Prediction Models in the Presence of Class Imbalance. *Duke University Oral Presentation*. April 2023
4. Transfer Learning with Uncertainty Quantification: Random Effect Calibration of Source to Target (RECaST). *ENAR Poster Presentation*. March 2023
5. Improving Event Time Prediction by Learning to Partition the Timeline. *Duke University Oral Presentation*. March 2023
6. Improving Event Time Prediction by Learning to Partition the Timeline. *North Carolina State University Oral Seminar*. September 2022
7. Transfer Learning with Uncertainty Quantification: Random Effect Calibration of Source to Target (RECaST). *Joint Statistical Meeting Poster Presentation*. August 2022

Service

2023 Session Chair
ENAR

2022-2023 Student Representative
NCSU Statistics Seminar Committee

2022 Graduate Mentor
NCSU Summer Institute in Biostatistics

2020-2022 President
NCSU Statistics Graduate Student Association

2020-2022 Vice President
NCSU Statistics in the Community (projects and reports)

2021 Organizer
NCSU Virtual Datathon (article)

2021 Organizer
NCSU College of Science Research Symposium

2019-2020 Organizer
NCSU Deep Learning Reading Group

2017-2018 Vice President
WSU Women in Computer Science Club

2017-2018 Student Representative
WSU Dean's Advisory Council

2016 - 2018 President
WSU Physics Club

Awards and Honors

2021 Paige Plagge Graduate Award for Citizenship
NCSU Statistics Department

2018 Outstanding Graduate in Computer Science
WSU

2018 Outstanding Graduate in Physics
WSU

2018 Outstanding Graduate in Mathematics
WSU

2018 Outstanding Student Leader Nominee
WSU

2018 1st Place
Midwest Undergraduate Data Analytics Competition

2017 Best College Overall
ASA Police Data Challenge (link to competition)

2017 Top 5 Undergraduate
MinneAnalytics Data Analytics Competition