Jimmy Hickey

✉ jimmyjhickey@gmail.com | 🌎 jimmyjhickey.com

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* |