# Tianwen Ma



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#### **EDUCATION**

2022 University of Michigan School of Public Health, Ann Arbor, MI

Ph.D. in Biostatistics

Dissertation: Novel Statistical Methods for EEG-Based Brain Computer Interfaces

Advisors: Professors Jian Kang (Chair) and Jane E. Huggins (Collaborator)

2018 University of Michigan School of Public Health, Ann Arbor, MI

M.S. in Biostatistics

2015 University of Michigan, Ann Arbor, MI

B.S. in Honors Statistics with High Distinction

Thesis: A Functional Data Analysis Approach to Looking at Handwriting Data

Advisor: Professor Edward Rothman

2015 Sichuan University, Chengdu, China

B.S. in Statistics (Dual degree)

#### **RESEARCH POSITIONS**

Sep 2022 – Present Research Assistant Professor

<u>Department of Biostatistics and Bioinformatics</u>, Rollins School of Public Health,

and <u>Emory Brain Health Center</u>, Emory University

Develop novel statistical methods with applications to brain-computer interface

and neuroimaging data.

Provide statistical support for physicians at Emory Brain Health Center (BHC). Serve on Emory Brain Health Center standing Data and Safety Monitoring Board

(DSMB).

Jan 2017 – Aug 2022 Graduate Student Research Assistant

Department of Radiology, School of Medicine, and Department of Biostatistics,

School of Public Health, University of Michigan

Supervisors: Professors Timothy D. Johnson and Bin Nan

Provided semi-independent statistical consulting services to more than 20 radiology faculty members and submitted more than 40 abstracts and manuscripts to radiology journals and RSNA annual conferences.

Jan 2016 – April 2016 Undergraduate Student Research Consultant

Consulting for Statistics, Computing & Analytics Research (CSCAR), University of

Michigan

Supervisor: Professor Edward Rothman (Emeritus) Built classification tree and logistic regression models to find significant risk factors for coronary artery disease adjusting for troponin level.

## April 2015 – Dec 2015 Undergraduate Student Researcher

Department of Statistics, University of Michigan

Supervisor: Professor Edward Rothman (Emeritus) Completed an honor thesis on handwriting data recognition with newly collected data (with IRB approval) by fitting functional data curve objects and applying principal differential analysis to create individual writing templates.

# **PUBLICATIONS (PUBLISHED)**

- 1. Bonilha, H., Ma, T., Prabhakaran, S., Bhadsavle, L., Belagaje, S., Blanke, D., ... & Nahab, F., (Feb 2025). The Impact of Social Determinants of Health on Stroke Rehabilitation Service Utilization Measured During Acute Stroke Hospitalization. Topics in Stroke Rehabilitation. https://doi.org/10.1080/10749357.2025.2466391
- 2. Jumah, A., Mohamedelkhair, A., Elfaham, A., Batista, S., Ma, T., Ngo, S., ... & Ramadan, A. R. (2025). Predicting Stroke in Patients with Infective Endocarditis: A Systematic Review and Meta-Analysis of Risk Factors. International Journal of Stroke. https://doi.org/10.1177/17474930251322679
- 3. Jani, J. A., Cowan, D., Ouonkap, L., Adesina, D., Ma, T., Chen, S., ... & Hoang, K. B. (2025). Missing the message to brain tumor patients: a 2023 twitter analysis among patients, informal caregivers, and healthcare professionals in glioblastoma multiforme. Journal of Neuro-Oncology, 1-8. https://link.springer.com/article/10.1007/s11060-025-04948-8
- 4. Jumah, A., Mohamedelkhair, A., Elfaham, A., Batista, S., Ma, T., Ngo, S., ... & Ramadan, A. R. (2025). Abstract WP279: Predicting Stroke in Patients with Infective Endocarditis: A Comprehensive Systematic Review and Meta-Analysis of Risk Factors. Stroke, 56(Suppl 1), AWP279-AWP279. https://doi.org/10.1161/str.56.suppl 1.WP279
- 5. Ro, J., Owens, J., Ma, T., Wu, Y., Jumah, A., Starnes, D., ... & Nahab, F. (2025). Abstract TP118: Early Outpatient Follow-up After Acute Ischemic Stroke Reduces 30-day and 90-day Inpatient Readmissions. Stroke, 56(Suppl 1), ATP118-ATP118. https://doi.org/10.1161/str.56.suppl 1.TP118
- 6. Jumah, A., Owens, J., Ma, T., Wu, Y., Ro, J., Starnes, D., ... & Nahab, F. (2025). Abstract TP144: Telemedicine Appointments early after Acute Ischemic Stroke May Reduce 30-day Emergency Department Visits. Stroke, 56(Suppl 1), ATP144-ATP144. https://doi.org/10.1161/str.56.suppl 1.TP144
- 7. Touponse, S.C., Guo, Q., Ma, T., Maples-Keller, J.L., Rothbaum, B.O., and Dunlop, B.W. (2024). Effect of Agreement between Clinician-Rated and Patient-Reported PTSD Symptoms on Intensive Outpatient Treatment Outcomes. Psychiatric Research. https://doi.org/10.1016/j.psychres.2024.116287
- 8. Stubbs, N.M., Garner, J.A., Akinwunmi-Williams, T., Jani, J., Ngo, S., Ma, T., Robinson, E., Jackson, T., Olson, J., Huntoon, K. and Nduom, E.K., Financial Toxicity in High-Grade Glioma Resection: A

- Retrospective Analysis. (2024). *World neurosurgery*, pp.S1878-8750. https://doi.org/10.1016/j.wneu.2024.11.060
- Gulati, A., Ma, T., Rolle, I., Peterson, R., Nemes, B., Chen, J., Heckathorn, M., Ratcliff, J., Bianchi, N., Fleming, C., Frankel, M., Grotta, J., Bowry, R., Parker, S., Hicks, W., and Navalkele, D. (2024).
  Predictors and Outcomes of Hematoma Expansion and Neurological Decline in Intracerebral Hemorrhage: A Multi-Site Mobile Stroke Unit Study. Stroke: Vascular and Interventional Neurology. https://doi.org/10.1161/SVIN.124.001546
- 11. Chandler, K., Pisharody, V. A., Grigorian, J., Mao, S., **Ma, T.**, Jahangiri, A., Chern, J., and Hoang, K. (2024). Beyond childhood: exploring the state of transitional care in pediatric pilocytic astrocytoma. *Neurosurgical Focus*, *57*(2), E13. <a href="https://doi.org/10.3171/2024.5.FOCUS2486">https://doi.org/10.3171/2024.5.FOCUS2486</a>

- 14. Dhruva, N., Albin, C., Ma, T., Chandler, K., & Grigorian, J. (2024, April). Brain Death: The Consequence of a 2nd Test (P1-2.004). In *Neurology* (Vol. 102, No. 17\_supplement\_1, p. 6141). Hagerstown, MD: Lippincott Williams & Wilkins. <a href="https://www.neurology.org/doi/abs/10.1212/WNL.000000000000206267">https://www.neurology.org/doi/abs/10.1212/WNL.000000000000000206267</a>
- 15. Dhruva, N., Albin, C., **Ma, T.**, Chandler, K., & Grigorian, J. (2024, April). The Role of Neurocritical Care Specialists in Brain Death Testing (PL4. 002). In *Neurology* (Vol. 102, No. 17\_supplement\_1, p. 6187). Hagerstown, MD: Lippincott Williams & Wilkins. https://doi.org/10.1212/WNL.0000000000206303
- 16. Thomas, N., Ning, C., Gross, R. E., **Ma, T.**, Haroon, E., & Goldsmith, D. R. (2024). 485 Investigating the Impact of Inflammation on White Matter Tracts using Diffusion Tensor Imaging that may Contribute to Motivational Deficits and Negative Symptoms in Patients with Schizophrenia. *Journal of Clinical and Translational Science*, 8(s1), 143-143. <a href="https://doi.org/10.1017/cts.2024.411">https://doi.org/10.1017/cts.2024.411</a>
- 17. Roseland, M., Shampain, K., Stein, E., Uppal, S., Wasnik, A., **Ma, T.**, Johnson, T.D., and Maturen, K., (2024) Neoadjuvant Chemotherapy for High Grade Serous Ovarian Cancer: Radiologic-Pathologic Correlation of Response Assessment and Predictors of Progression. *Abdominal Radiology*. 1-9. <a href="https://link.springer.com/article/10.1007/s00261-024-04215-w">https://link.springer.com/article/10.1007/s00261-024-04215-w</a>
- 18. Bonilha, H., **Ma, T.**, Prabhakaran, S., Bhadsavle, L. J., Belagaje, S. R., Blanke, D., ... & Nahab, F. B. (2024). Abstract TMP30: The Impact of Social Influences on Rehabilitation Services Utilization After Stroke. *Stroke*, *55*(Suppl 1), ATMP30-ATMP30. https://doi.org/10.1161/str.55.suppl 1.TMP30
- 19. Zhou, S., Hanna, T., **Ma, T.**, Johnson, T.D., Lamoureux, C., Johnson, J.O., Steenburg, S.D., Dunkle, J.W., and Chong, S., (2023) Daytime, Evening, and Overnight Shifts: The 24-hour Radiology Cycle and

- Impact on Interpretative Accuracy. *Emergency Radiology*. https://link.springer.com/article/10.1007/s10140-023-02161-6
- 20. Bamidele, O., Lee, E., Edith, S., Chaitanya Madamanchi, C., Sowmya, B., **Ma, T**., Apart, J., Lu, J.C., Adam, D., and Agarwal, P., (2023). Effects of Mitral Valve Prolapse on Quantification of Mitral Regurgitation and Ejection Fraction using Cardiac MRI. *Radiology: Cardiothoracic Imaging*. <a href="https://doi.org/10.1148/ryct.220069">https://doi.org/10.1148/ryct.220069</a>
- 21. Sella, E., Joshi, A., Balasubramanian, S., Senthilkumar, D., **Ma, T.**, and Agarwal, P., (2022). Is there gender bias in radiology job postings? *Current Problems in Diagnostic Radiology*. https://doi.org/10.1067/j.cpradiol.2022.11.002
- 22. Turk, S., Wang, N. C., Kitis, O., Mohammed, S., **Ma, T**., Lobo, R., Kim, J., Camelo-Piragua, S., Johnson T.D., Kim, M.M., Junck, L., and Bapuraj, J. R., (2022). Comparative study of radiologists vs machine learning in differentiating biopsy-proven pseudoprogression and true progression in diffuse gliomas. *Neuroscience Informatics*, *2*(3), 100088. <a href="https://doi.org/10.1016/j.neuri.2022.100088">https://doi.org/10.1016/j.neuri.2022.100088</a>
- 23. **Ma, T.**, Li, Y., Huggins, J.E., Zhu, J., and Kang, J., (2022). Bayesian inferences on neural activity in EEG-Based Brain-Computer Interface. *Journal of the American Statistical Association (JASA)*. <a href="https://doi.org/10.1080/01621459.2022.2041422">https://doi.org/10.1080/01621459.2022.2041422</a>
- 24. **Ma, T.**, Huggins, J.E., and Kang, J., (2021, December). Adaptive sequence-based stimulus selection in an ERP-based Brain-Computer Interface by Thompson sampling in a multi-armed bandit problem. *In 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM) (pp. 3648-3655). IEEE.* https://doi.org/10.1109/BIBM52615.2021.9669724
- 25. Chong, S., Hanna, T., Lamoureux, C., **Ma, T**., Weber, S., Johnson, J.O., Friedberg, E., Pyatt Jr, R.S., Everett, C.J. and Johnson, T.D., (2021). Interpretations of examinations outside of radiologists' fellowship training: assessment of discrepancy rates among 5.9 million examinations from a national teleradiology databank. *American Journal of Roentgenology*. <a href="https://www.ajronline.org/doi/abs/10.2214/AJR.21.26656">https://www.ajronline.org/doi/abs/10.2214/AJR.21.26656</a>.
- 26. Ellis, C.N., Neville, S.J., Sayyouh, M., Elder, J.T., Nair, R.P., Gudjonsson, J.E., **Ma, T.**, Kazerooni, E.A., Rubenfire, M. and Agarwal, P.P., (2021). Epicardial adipose tissue volume is greater in men with severe psoriasis implying increased cardiovascular disease risk: A cross-sectional study. *Journal of the American Academy of Dermatology*. https://doi.org/10.1016/j.jaad.2021.09.069
- 27. Pujara, A.C., Joe, A.I., Patterson, S.K., Neal, C.H., Noroozian, M., **Ma, T**., Chan, H.P., Helvie, M.A. and Maturen, K.E., (2020). Digital breast tomosynthesis slab thickness: impact on reader performance and interpretation time. *Radiology*, *297*(3), pp.534-542. https://doi.org/10.1148/radiol.2020192805
- 28. Bapuraj, J.R., Bruzek, A.K., Tarpeh, J.K., Pelissier, L., Garton, H.J., Anderson, R.C., Nan, B., **Ma, T**. and Maher, C.O., (2019). Morphometric changes at the craniocervical junction during childhood. *Journal of Neurosurgery: Pediatrics*, *24*(3), pp.227-235. https://doi.org/10.3171/2019.4.PEDS1968
- 29. Türk, S., Kim, J., Lobo, R., Bapuraj, J., **Ma, T**., Johnson, T.D., Piragua, S.C., Junck, L.R. and Srinivasan, A., (2019). Differentiation of biopsy-proven true and pseudo-progression by conventional and functional MRI sequences. *European Congress of Radiology-ECR 2019*. https://dx.doi.org/10.26044/ecr2019/C-0958
- 30. Viglianti, B.L., Wale, D.J., **Ma, T.**, Johnson, T.D., Bohnen, N.I., Wong, K.K., Ky, C., Frey, K.A., Townsend, D.M., Rubello, D. and Gross, M.D., (2019). Effects of plasma glucose levels on regional cerebral 18F-fluorodeoxyglucose uptake: Implications for dementia evaluation with brain PET

imaging. *Biomedicine & Pharmacotherapy, 112*, p.108628. https://doi.org/10.1016/j.biopha.2019.108628

- 31. Woolen, S.A., Kazerooni, E.A., Steenburg, S.D., Nan, B., **Ma, T.**, Wall, A., Linna, N.B., Gayed, M.J., Kushdilian, M.V., Parent, K. and Cahalan, S., (2018). Optimizing electronic release of imaging results through an online patient portal. *Radiology*, *290*(1), pp.136-143. https://doi.org/10.1148/radiol.2018180883
- 32. Bailey, L.H., Jeffries, D.O., Bailey, J.J., Pinsky, R.W., Bailey, J.E., Nan, B., **Ma, T**. and Klein, K.A., (2018). Breast care problems on call: training residents to manage effectively. *Emergency Radiology*, *25*(4), pp.375-380. <a href="https://doi.org/10.1007/s10140-018-1593-z">https://doi.org/10.1007/s10140-018-1593-z</a>

#### MANUSCRIPTS UNDER REVIEW

- 33. Stern, M., Ma, T., Verkerke, H., Ngo, S., Jackson, J., and Taylor, J., Collaborative Care for Anxiety: Differences in Patient and Clinical Characteristics on Treatment Outcomes in a Safety-Net Hospital System. *Community Mental Health Journal*.
- 34. Grigorian, J., Pisharody, V., Chisango, Z., Chow, J., Mao, S., Ma, T., Jahangiri, A., Chern, J., and Hoang, K. Clinical and Genomic Predictors Differ in Pediatric and Adult Pilocytic Astrocytoma: A Single-Center Experience with over 350 Patients. *Journal of Neurosurgery: Pediatrics*.
- 35. Ma, T., Huggins, J.E., and Kang, J., Bayesian Signal Matching Training Framework for Data Integration in ERP-based Brain-Computer Interface. *Journal of the American Statistical Association (JASA A&CS)*. Revision submitted. Preprint version available at <a href="https://arxiv.org/abs/2401.07111">https://arxiv.org/abs/2401.07111</a>

#### REREARCH GRANTS

### <u>ACTIVE</u>

Alzheimer's Association Ref-ID 24IR-AND-1176527 (PI: Sun Phil; co-I: Ma T)
 Alzheimer's Disease Association & ANSR Foundation
 2% out of \$200,000
 Development of chemical exchange saturation transfer (CESF) MRI for dementia with Lewy bodies

### **COMPLETED**

Georgia CTSA-BERD UL1TR002378 (PD/PI: Ma T; Co-I: Huggins J)
 National Center for Advancing Translational Sciences of the National Institutes of Health.
 \$20,000
 Forward Dynamic Event Selection Algorithm in ERP-Based Brain-Computer Interface

### **PRESENTATIONS**

# **INVITED (METHODS)**

1. Bayesian Signal Matching for Transfer Learning in ERP-based Brain Computer Interface, Brown Bag Seminar, University of Michigan, Ann Arbor, MI, Feb 14, 2025 (Online).

- 2. Challenges and Opportunities in P300 ERP-based Brain-Computer Interface, Challenges in Neuroimaging Data Analysis, hosted by the Institute for Mathematical and Statistical Innovation (IMSI), University of Chicago, Chicago, IL, Aug 26 30, 2024 (In-person).
- 3. Bayesian Signal Matching Training Framework for Data Integration in ERP- Based Brain-Computer Interface, <u>Statistics Methods in Imaging (SMI)</u>, University of Minnesota, Minneapolis, MN, May 2023 (In-person).
- 4. Adaptive sequence-based stimulus selection in ERP-based Brain-Computer Interface, <u>Translational Neuroengineering (TNE)</u> Journal Club, University of Michigan, Ann Arbor, MI, Jun 2022 (Hybrid).
- 5. Bayesian inferences in EEG-based Brain-Computer Interface via the split-and-merge Gaussian process, Statistical Lecture Series No. 191, Remin University of China, Beijing, May 2022 (Online).
- 6. Bayesian inferences in EEG-based Brain-Computer Interface via the split-and-merge Gaussian process, *Senior PhD Student Research Showcase Symposium*, University of Michigan, Ann Arbor, MI, April 2022.
- 7. Bayesian inferences in EEG-based Brain-Computer Interface via the split-and-merge Gaussian process, Emory University, Atlanta, GA, Mar 2022.
- 8. Adaptive sequence-based stimulus selection in ERP-based Brain-computer Interface by Thompson Sampling in a multi-armed bandit problem, the IEEE International Conference on Bioinformatics and Biomedicine (BIBM) 2021 Workshop, Dec 2021 (Virtual)
- 9. Bayesian inferences in EEG-based Brain-Computer Interface via the split-and-merge Gaussian process, *Stanford CogT Lab*, Sep 2021 (Virtual).

# **CONTRIBUTED (METHODS)**

- A Bayesian Covariance Regression Approach to Adjust for Motion Effects in Resting-State fMRI Data, <u>Organization for Human Brain Mapping (OHBM 2024)</u>, Seoul, South Korea, June 23 – 27, 2024 (Inperson).
- 11. A Bayesian Covariance Regression Approach to Address Motion Effects in Resting-State fMRI Data, CMStatistics 2023, Berlin, Germany, Dec 16, 2023.
- 12. Address Practical Constraints of Adaptive Stimulus Selection Algorithm by Thompson Sampling in ERP-based Brain-Computer Interfaces, Society for Neuroscience, Washington DC, Nov 11 15, 2023.
- 13. Bayesian Signal Matching Training Framework for Data Integration in ERP-Based Brain-Computer Interface, *Center for Biomedical Imaging Statistics (CBIS)*, Emory University, Atlanta, GA, Mar 24, 2023.
- 14. Bayesian Signal Matching Training Framework for Data Integration in ERP-Based Brain-Computer Interface, *Eastern North American Region (ENAR) Spring Meeting*, Vanderbilt University, Nashville, TN, Mar 20, 2023.
- 15. Adaptive sequence-based stimulus selection in ERP-based Brain-computer Interface by Thompson Sampling in a multi-armed bandit problem, *Neuroscience Society (SfN)*, Nov 2021 (Virtual)
- 16. Bayesian inferences on neural activity in EEG-based Brain-Computer Interface, *Eastern North American Region (ENAR) Spring Meeting*, Mar 2021 (Virtual).
- 17. Bayesian inferences on neural activity in EEG-based Brain-Computer Interface, *Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS)*, Feb 2021 (Virtual).
- 18. Proposal of Bayesian inferences on neural activity in EEG-based Brain-Computer Interface, Michigan

Shark Tank Competition, University of Michigan, Ann Arbor, MI, Feb 2020 (Hybrid).

# **CONTRIBUTED (COLLABORATIONS) (Student Effort Included)**

- 19. Cowan, D., Ma, T., Zhu, Y., et al. Timing of Complication Following Stereotactic Brain Biopsy: A Paradigm Shift towards Same-Day Surgery. *American Association of Neurological Society (AANS)* 2025.
- 20. Jani, J.A., Ma, T., Chen, S., et al. Comparing Perspectives: A 2023 Twitter Analysis Among Patients, Informal Caregivers, and Healthcare Professionals in Glioblastoma Multiforme. *American Association of Neurological Society (AANS)* 2025.
- 21. Jumah, A., Ma, T., Ngo, S., et al. Predicting Stroke in Patients with Infective Endocarditis: A Comprehensive Systematic Review and Meta-Analysis of Risk Factors. *International Stroke Conference*, Los Angeles, CA, Feb 2025.
- 22. Ro, J., Ma, T., Wu, Y., et al. Early Outpatient Follow-up After Acute Ischemic Stroke Reduces 30-day and 90-day Inpatient Readmissions, *International Stroke Conference*, Los Angeles, CA, Feb 2025.
- 23. Jumah, A., Ma, T., Wu, Y., et al. Telemedicine Appointments early after Acute Ischemic Stroke May Reduce 30-day Emergency Department Visits, *International Stroke Conference*, Los Angeles, CA, Feb 2025.
- 24. Ndirangu, B., Ma, T., Ngo, S., et al. Dissecting Survival Trends: A Comparative Analysis of Resected Dominant Versus Solitary Brain Metastases. *Congress of Neurological Surgeons*, Houston, Texas. (Oral Presentation)
- 25. Snyder, D., Ma, T., et al. Association of Varying Concentrations of Platelets in PRP Preparations with Outcomes in Knee Osteoarthritis. *Emory Sports Medicine Center & Emory Research Day*, Atlanta, GA, June 2024. (Oral Presentation)
- 26. Stubbs, N., Ma, T., Ngo, S., et al. Socioeconomic Status and Financial Implications in High Grade Glioma Resection: A Retrospective Study. *Harvard Medical School & BSCP 23<sup>rd</sup> Annual New England Science Symposium*, Boston, MA. (Poster Presentation)
- 27. Warren, K., Ma, T., Ngo, S., et al. Clinical Characteristics of Patients with Vestibular Schwannoma with Neurofibromatosis Type 2. *Georgia Neurosurgical Society* Annual Meeting & Scientific Assembly, Sea Island, GA, and *Congress of Neurological Surgeons*, Houston, Texas. (Poster Presentation)
- 28. Pritchett, C., Ma, T., et al. Ultrabrief Right Unilateral Electroconvulsive Therapy: A Safe and Effective Treatment Option for Psychosis. *International Psychogeriatric Association*, May 2024 (Poster Presentation)
- 29. Taylor, J., Ma, T., Ngo, S., et al. The Power of Participation: Reducing GAD-7 Scores Using a Collaborative Care Model in a Safety-Net Hospital System. *American Psychiatric Association (APA) Annual Meeting*, New York City, NY, May 2024 (Poster Presentation)
- 30. Hermida, A., Ma, T., et al. Navigating Treatment-Resistant Depression: Determining Response and Remission Rates of Electroconvulsive Therapy in Adults After Failed Response to Ketamine Infusions. *International Society of ECT Neuro-Simulation (ISEN)*, Feb 2024 (Poster Presentation)
- 31. Stern, M., Ngo, S., Ma., T. et al. The Power of Participation: Reducing GAD-7 Scores Using a Collaborative Care Model in a Safety-Net Hospital System. *Southern Society of General Internal Medicine*, New Orleans, LA, Feb 2024. (Poster Presentation)

### **MASTER ADVISEES**

Shumeng Chen 2023 – 2025

Thesis Title: Adaptive Sequence-Based Stimulus Selection in Calibration-less ERP

Brain-Computer Interfaces: A Unified Framework with LDA

Yunong Wu 2023 – 2025

Thesis Title: Bayesian Classification with Split-and-Merge Gaussian Process

(SMGP) Prior in EEG-based Brain-Computer Interfaces

Chenyang Li 2023 – 2025

Thesis Title: Adaptive Bayesian Framework in Calibration-less ERP Brain-

**Computer Interfaces** 

Savannah Ngo 2023 – 2025

REAL scholar student helping with biostatistical support

Shuting Mao 2024 – 2025

Capstone Title: Attention-Based Analysis for Enhancing Brain-Computer

Interfaces (BCI) Speller Performance

### **DEPARTMENTAL SERVICES**

2024 – 2025	BIOS MPH/MSPH and Faculty Recruitment Admission Committee (Member)
2023 – 2024	BIOS Departmental Seminar Organizer (Co-organize with Dr. Chang Su)
	BIOS PhD Admission Interview (with Dr. Limin Peng)
2022 – 2023	BIOS MPH/MSPH Admission Committee (Member)
2022 – Present	Emory BHC Data Safety and Monitoring Board (Member)

#### **REVIEW EXPERIENCE**

2024 IEEE Transactions on Automation Science and Engineering

2024 American Journal of Epidemiology 2023 – Present Annals of Applied Statistics (AOAS)

2022 – Present Statistics in Medicine

2022 – present Statistics in Biosciences (SIBS)

2022 – Present Journal of American Statistical Association (JASA)

2021 – Present Journal of Trauma Nursing

### **TEACHING EXPERIENCE**

Jan 2024 – Apr 2024 Instructor for BIOS 738 Advanced Bayesian Inference

Emory University, Department of Biostatistics and Bioinformatics

• Gave lectures and 5 homework assignments to graduate students

Sep 2015 – Dec 2015 Undergraduate Student Instructor for Statistics 408 and Math 217

University of Michigan, Department of Statistics

• Held discussion sessions on introductory statistical consulting for over 100

undergraduate students

• Answered questions during office hours, graded homework assignments, and mid-term exams

### **INDUSTRIAL EXPERIENCE**

Jun 2020 - Aug 2020

# **Experimental Intern (Remote)**

AbbVie Inc., Statistics, Data, and Statistical Science Department

- Reviewed existing methods and conduced simulation studies on Bayesian historical borrowing and dose-response clinical trials
- Delivered a final presentation and submitted the manuscript to Statistics in Biosciences (SIBS)

### **HONORS AND AWARDS**

2022	Departmental Excellence in Research Honorable Mention
2021	Best Poster of Michigan Student Symposium for Interdisciplinary Statistical
	Science (MSSISS) (100 USD)
2020	Best Shark Tank Research Proposal Award (1,000 USD)
2019	American Society of Emergency Radiology (ASER) Grant (6,000 USD).
2016	Dean's Scholarship (21,000 USD)
2014	Mathematical Contest in Modeling (MCM) Honorable Mentions
2013	The Second Prize Scholarship (3,000 CNY)
2012	Kebo Scholarship (1,500 CNY)

### **PROGRAMMING LANGUAGES**

• R (ggplot2), Python (Pytorch, Scikit-learn), MATLAB, SAS, and LaTeX.

### **LANGUAGES**

• Native: Chinese | Fluent: English | Conversational: Spanish