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Amelia Tran

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Education

University of Pennsylvania May 2023
M.S. in Biostatistics

Mount Holyoke College May 2021
B.A. in Statistics, Data Science. Summa Cum Laude

Skills

Languages: R, Python, SQL, SAS, Java, LaTeX
Tools: Git/GitHub, Jupyter Notebook, VS Code, PyCharm

Industry Experience

Genentech Inc. | *Data Scientist, South San Francisco, CA* Jun 2023 –
- Provide statistical analysis and R/SQL/SAS programming support to different therapeutic molecules
- Manage SDTM mapping, ADaM derivation, and TLG delivery to clinical scientists across Product Development
- Collaborate cross-departments to develop computational tools and support study design through real-world data

Regeneron Pharmaceuticals Inc. | *Biostatistics Intern, Tarrytown, NY* Jun – Aug 2022
- Quantified physical activity with arctools R package to generate analysis for minute-level accelerometry data
- Investigated physical activity variability through intraclass correlation: independent, auto-regressive, exchangeable

Academic Experience

University of Pennsylvania | *Graduate Research Assistant, Philadelphia, PA* Sep 2021 – May 2023
- MS thesis: Evaluated a novel prognostic score-based weighting approach for facility profiling metrics
- Worked on kidney disease related projects to estimate causal effects of transplant centers, multiple wait-listing, HCV-infected kidney transplants on survival with Cox PH, time-dependent Cox, IPTW, propensity score matching

Institute for Pure and Applied Mathematics | *Research Fellow, Los Angeles, CA* Jun – Aug 2021
- Developed physics-informed neural networks with regularization to simulate wave propagation in Python
- Designed optimal network architecture with PDEs and boundary/velocity conditions of the wave equation

Memorial Sloan Kettering Cancer Center | *Research Fellow, New York City, NY* Jun – Aug 2020
- Evaluated how bilirubin change affects survival in cirrhosis with Cox PH, time-dependent Cox, and Joint Model
- Extracted interval endpoints and event statuses from patients' enrollment time, and produced visualizations in R

Mount Holyoke College | *Undergraduate Research Assistant, South Hadley, MA* Jun 2019 – May 2020
- Developed *ncopula* R package to construct nested Archimedean copula models for interdependent data
- Designed unit tests to examine the package functionality and provided reproducible documentation

Selected Publications

- Evaluating a facility-profiling metric based on survival probability: Application to U.S. transplant centers. **AH Tran**, PP Reese, DE Schaubel. 2024+
- Multiple Listing In Kidney Transplantation Following Implementation Of The Concentric Circle Kidney Allocation Policy. VS Potluri, **AH Tran**, N Kye, N Al Haddad, S Tandukar, TB Dunn, P Reese, DE Schaubel. 2024+
- Prognostic score-based methods for estimating center effects based on survival probability: Application to post-kidney transplant survival. Lee Y, Reese PP, **Tran AH**, Schaubel DE. Statistics in Medicine. 2024.
- Five-Year Allograft Survival for Recipients of Kidney Transplants From Hepatitis C Virus Infected vs Uninfected Deceased Donors in the Direct-Acting Antiviral Therapy Era. Schaubel DE, **Tran AH**, Abt PL, Potluri VS, Goldberg DS, Reese PP. JAMA. 2022;328(11):1102–1104.
- Using physics-informed regularization to improve extrapolation capabilities of neural networks. Davini D*, Samineni B*, Thomas B*, **Tran AH***, Zhu C*, Ha K, Dasika G, White L. Machine Learning and the Physical Sciences Workshop, Neural Information Processing Systems (NeurIPS) 2021.