Chau Tran

Department of Statistics University of California, Davis

Education

Ph.D. in Statistics, University of California, Davis, 2023 - present

M.A. in Statistics, University of California, Santa Barbara, 2022 Advisors: Alexander Petersen, Sang-Yun Oh

B.A. in Statistics, University of California, Santa Barbara, 2020 Minor in Mathematics

PUBLICATIONS

[4] Zhen Zhou, Hongming Li, Chau Tran, ..., and Yong Fan. "Cross-scale functional connectivity patterns of the aging brain learned from the multi-cohort iSTAGING study". *Alzheimer's & Dementia* 19, 2023.

Email: cbtr@ucdavis.edu

Website: https://cbtran.github.io

- [3] Ruobin Liu, Chao Zhang, Chau Tran, Sophie Achard, Wendy Meiring, and Alexander Petersen. "A mixed model approach for estimating regional functional connectivity from voxel-level BOLD signals". arXiv:2211.02192 [stat.ME].
- [2] Chau Tran and Guo Yu. "A completely tuning-free and robust approach to sparse precision matrix estimation". 39th International Conference on Machine Learning (ICML), 2022.
- [1] Chau Tran, Pedro Cisneros-Velarde, Sang-Yun Oh, and Alexander Petersen. "Family-wise error rate control in Gaussian graphical model selection via distributionally robust optimization". *Stat* 11(1), 2022.

RESEARCH EXPERIENCE

Data Scientist, Perelman School of Medicine, University of Pennsylvania, 2022 - 2023

Advisor: Yong Fan

Worked on applications of statistics and machine learning methods to neuroimaging.

Research Assistant, University of California, Santa Barbara, 2021 - 2022

Advisors: Alexander Petersen, Wendy Meiring

Developed spatio-temporal models for statistical analysis of functional MRI data.

Master's Thesis, University of California, Santa Barbara, 2022 - 2022

Advisors: Alexander Petersen, Sang-Yun Oh

Thesis on the topics of high-dimensional statistics and Gaussian graphical models.

TEACHING EXPERIENCE

Teaching Assistant, University of California, Davis

- STA 108: Regression Analysis, Summmer 2025
- STA 200C: Introduction to Mathematical Statistics II (MS level), Spring 2025
- STA 232B: Applied Statistics II (PhD level), Winter 2025
- STA 232A: Applied Statistics I (PhD level), Fall 2024
- STA 100: Applied Statistics for Biological Sciences, Winter 2024, Spring 2025
- STA 013: Elementary Statistics, Fall 2023, Spring 2024, Winter 2025

Teaching Assistant, University of California, Santa Barbara

- PSTAT 126: Regression Analysis, Winter 2022
- PSTAT 131/231: Statistical Machine Learning, Fall 2021
- PSTAT 134: Statistical Data Science, Spring 2021
- PSTAT 197: Data Science Capstone, Winter Spring 2021
- PSTAT 5A: Introductory Statistics, Winter 2021
- PSTAT 120A: Probability and Statistics I, Fall 2020

AWARDS AND GRANTS

Graduate Student Researcher, UC Davis, Summer 2024 International Conference on Machine Learning (ICML) Travel Award, 2022 Graduate Student Researcher, UC Santa Barbara, Summer 2021, Spring 2022

SERVICE

Reviewer for the International Conference on Artificial Intelligence and Statistics (AISTATS), 2023

Software

qfuncMM: Mixed models for quantifying functional connectivity (R package on GitHub).

FGLMtrunc: Truncated estimation in functional generalized linear regression models (on CRAN).

robsel: Robust Selection algorithm for the graphical lasso (on CRAN and PyPI).