

Kenneth Lee

<https://kenneth-lee-ch.github.io/>

Email : leechinhongkenneth@gmail.com

Mobile : +1-808-670-7671

Linkedin : chinhongkennethlee

Google Scholar : Kenneth Lee

SUMMARY

- **About me:** A Ph.D. student in Electrical and Computer Engineering, advised by **Murat Kocaoglu**, at Purdue University. My research focuses on fundamentals of causal discovery and its application to machine learning problems such as invariant prediction and root cause analysis.
- **Skills:** Python, R, EconML, PyAgrum, gCastle, causal-learn, PySpark, Tensorflow, Scikit-learn, Pytorch, SQL, OpenCV, Numpy, Scipy, Tableau, MongoDB, AWS EC2, AWS dynamodb, AWS S3, MapReduce, HDFS, web scraping

EDUCATION

- **Purdue University** West Lafayette, IN
Doctor of Philosophy in Electrical and Computer Engineering Aug. 2021 - Present
 - **Relevant Coursework:** Rubin causal models, causal graphical models, deep learning, reinforcement learning, LLM reasoning, Bayesian inference
- **University of California, Davis** Davis, CA
Master of Science in Statistics Sep. 2019 - Jun. 2021
 - **Relevant Coursework:** Statistical machine learning, experiments design, longitudinal data analysis, optimization
- **Brigham Young University—Hawaii** Laie, HI
Bachelor of Science in Mathematics, Computer Science Sep. 2014 - Jun. 2018

PUBLICATION († EQUAL CONTRIBUTIONS)

- **K. Lee**, Z. Zhou, M. Kocaoglu. *Root Cause Analysis of Failures in Microservices via Bayesian Root Cause Discovery*, Under Review.
- A. Ikram†, **K. Lee**†, S Mitra, S Saini, S Bagchi, M. Kocaoglu. *Root Cause Analysis of Failures from Partial Causal Structures*, UAI, Rio de Janeiro, Brazil, 2025.
- **K. Lee**, B. Ribeiro, M. Kocaoglu. *Constraint-based Causal Discovery from a Collection of Conditioning Sets*, UAI, Rio de Janeiro, Brazil, 2025.
- **K. Lee**, M. Kocaoglu. *RCPC: A Sound Causal Discovery Algorithm under Orientation Unfaithfulness*, CausalUAI workshop, UAI, Barcelona, Spain, 2024.
- **K. Lee**, M. M. Rahman, M. Kocaoglu, *Finding Invariant Predictors Efficiently via Causal Structure*, UAI, Pittsburgh, USA, 2023.

WORK EXPERIENCE

- **Genentech** South San Francisco, CA
AI intern for Causal ML May. 2024 - Aug. 2024
 - **Causal discovery on single-cell gene networks:** Led a project from start to finish on causal discovery and experimental design across multiple domains. Analyzed the in-silico single-cell gene regulatory network dataset called DREAM4 based on the developed causal discovery algorithm.
- **Bayer AG** Whitestown, IN
Data Scientist Intern Aug. 2022 - Dec. 2022
 - **Causal Inference:** Evaluated the heterogeneous treatment effects of environmental factors and human practice to crop emergence from observational data using double machine learning and causal forests with dowhy and econml packages.
- **Experian DataLabs** Costa Mesa, CA
Data Scientist Intern May. 2022 - Aug. 2022
 - **On-chain analysis:** Evaluated on-chain credit risks on Ethereum via over TB+ data of financial activities from the lending protocols for assigning credit scores to wallet holders. Researched on smart contract vulnerability detection via reinforcement learning.