PEEM LERDPUTTIPONGPORN

101 N Dithridge St, Pittsburgh, PA 15213   peemlerd@gmail.com   peemlerd.github.io

EDUCATION

Carnegie Mellon University, Pittsburgh, PA   *2021 - present*
Ph.D. in Statistics and Public Policy (Expected 2026, GPA 3.93/4.00)
Research Interest: Causal Inference, Network Science, and Machine Learning for Public Policy.
Coursework: Statistical Machine Learning, Advanced Statistical Theory, Causal Inference,
Intermediate Statistics, Regression Analysis, PhD Microeconomics.

Swarthmore College, Swarthmore, PA   *2017 - 2021*
B.A. in Mathematics and Computer Science (Honors, GPA 3.86/4.00)
Coursework: Real Analysis I/II, Abstract Algebra I/II, Probability, Mathematical Statistics,
Artificial Intelligence, Machine Learning, Database Systems, Algorithms, Data Structure.

King's Scholarship   *2016*
A merit-based scholarship from the Royal Thai Government to study in the US.

RESEARCH EXPERIENCE

Graduate Student Researcher, Carnegie Mellon University, Pittsburgh, PA.   *Jan 2022 - present*
- Developed models that can predict the length-of-stay for ICU patients with 70% accuracy using Cox-proportional hazard model and random survival forest. Used multiple imputations to handle missing data.
- Applied cross-fitting to obtain valid confidence interval for variable importance measures.
- Currently working on causal inference in social networks with David Choi and Nynke Niezink.

Statistics Research Assistant, Swarthmore College, Swarthmore, PA.   *June 2020 - May 2021*
- Developed and implemented Bayesian methods to predict dinosaur extinction with R language.

Computer Science Research Assistant, Swarthmore College, Swarthmore, PA.   *Jan - Aug 2019*
- Researched on query complexity, complexity measures, and probabilistic methods.
- Published a paper titled *A Strong XOR Lemma for Randomized Query Complexity* to the *Theory of Computing* journal in 2020 (arXiv:2007.05580v2).

Policy Research Intern, Thailand Development Research Institute, Bangkok, Thailand.   *Dec 2019*
- Used *Pandas* and *Numpy* to manipulate data from the Program for International Student Assessment.
- Built a linear regression model to assess whether growth mindset and other demographic factors are associated with Thai students' education achievement.

TEACHING EXPERIENCE

Head Teaching Assistant, Carnegie Mellon University, Pittsburgh, PA.   *Aug 2021 - present*
- Coordinated with 5-6 teaching assistants on grading responsibilities, office hours, and other logistics to ensure courses run smoothly and students understand course materials.
- *Course assisted:* Program Evaluation (Spring 2023), Experimental Design (Fall 2021-2023).

Peer Mentor, Swarthmore College, Swarthmore, PA.   *Aug 2018 - May 2021*
- *Course assisted:* Data Structures and Algorithms, Intro to CS, Intro to Education, Intro to Economics.

LEADERSHIP EXPERIENCE

Heinz PhD Student Representative, Carnegie Mellon University, Pittsburgh, PA.   *May 2023 - present*
- Organized social events and happy hours to foster relationship among PhD students at Heinz College.
- Advocated on behalf of PhD students on issues such as stipend, workload, and advisor-advisee relationship.

Co-organizer, FATE Reading Group, Carnegie Mellon University, Pittsburgh, PA.   *Sept 2022 - May 2023*
- Invited speakers and planned weekly schedules for the Fairness in Machine Learning reading group.

DATA SCIENCE PROJECTS

Data Journalism
- Designed online surveys to learn Swarthmore students' preference on the reopening plan amidst the COVID-19 pandemic. Published survey results on a longform article on *The Phoenix* (student-run newspaper).
- Analyzed patterns of Writing Center usage among Swarthmore students.

SKILLS AND INTERESTS

Programming Languages	Python, R, C++, C, SQL
Languages	English (Fluent), Thai (Native), Chinese (Intermediate)
Interests and Activities	Running, Chinese music