Po-han Li

pohanli@utexas.edu | Personal Website | LinkedIn | Google Scholar

EDUCATION

University of Texas at Austin

Aug. 2021 – Present

Ph.D. Candidate in Electrical and Computer Engineering

Texas, U.S.A.

- Research Interest: multi-modal feature extraction, multi-modal data compression, cross-modal retrieval, and information extraction and sharing in multi-agent networks (see more details on my <u>Personal Website</u>)
- Decision, Information, and Communications Engineering (DICE) track
- Co-advised by Prof. Sandeep Chinchali and Prof. Ufuk Topcu

• GPA: 3.93/4.00

National Taiwan University

Sep. 2016 – Jul. 2020

Taipei, Taiwan

B.S. in Electrical Engineering

- GPA: overall: 4.26/4.30 (3.99/4.0), last 60: 4.29/4.30. Ranking: 4/177
- Honors: Dean's List (2016 Fall, 2017 Spring, and 2018 Fall)
- College Student Research Scholarship from the Ministry of Science and Technology (2017-2019)

Work Experience

Meta Inc. May. 2024 – Aug. 2024

 $\textit{Machine Learning Software Engineer Intern @ \textit{Infra+Ranking \& Foundational AI}}$

California, U.S.A

- Prediction calibration of Meta's multimodal foundation AI model for ads ranking
- Performance analysis and tracking of iterative model training
- Developed highly scalable classifiers and tools leveraging machine learning, regression, and rules-based models
- Adapted standard machine learning methods to best exploit distributed clusters

Center for IoT Innovation

Aug. 2020 – Jul. 2021

Research Fellow @ National Taiwan University of Science and Technology

Taipei, Taiwan

- Built a simulation platform for automated guided vehicles (AGV) in large-scale logistics warehousing centers
- Optimized AGV routing policy to achieve a 20% throughput improvement of inventory picking

China Network Systems Co., Ltd.

Oct. 2019 - Mar. 2021

Machine Learning and Data Scientist Intern

Taipei, Taiwan

- Analyzed data pattern and build prediction models for churn rate (unsubscribe) prediction
- Used Raspberry Pi distributed in the core net and network terminals to collect network-quality data
- Created databases and interactive reports to monitor over 1M set-top boxes in real-time

Internet Research Lab

Aug. 2019 – Jun. 2020

Research Assistant @ National Taiwan University

Taipei, Taiwan

- Participated in 5G mobile edge computing technology research and platform construction project supported by the Ministry Of Science And Technology
- Enhanced the quality of service (QoS) of multi-view 3D videos by reinforcement learning

SELECTED PUBLICATIONS

For a complete list of my publications, please check my Google Scholar.

- 1. P. Li, S. Chinchali, and U. Topcu. CSA: Data-efficient mapping of unimodal features to multimodal features. *Under review*, 2024 <u>link</u>
- 2. P. Li, O. S. Toprak, A. Narayanan, U. Topcu, and S. Chinchali. Online foundation model selection in robotics. *Under review*, 2024 link
- 3. P. Li, S.K. Ankireddy, R. Zhao, H. N. Mahjoub, E. Moradi-Pari, U. Topcu, S. Chinchali, and H. Kim. Task-aware distributed source coding under dynamic bandwidth. *Advances in Neural Information Processing Systems (NeurIPS)*, 2023 <u>link</u>

- 4. **P. Li**, S. Chinchali, and U. Topcu. Differentially private timeseries forecasts for networked control. *American Control Conference (ACC)*, 2023 <u>link</u>
- 5. O. Akcin, **P Li**, S. Agarwal, and S. Chinchali. Decentralized data collection for robotic fleet learning: A game-theoretic approach. In *Conference on Robot Learning* (*CoRL*), 2022 <u>link</u>

TEACHING EXPERIENCE

ECE 381V Learning-based Optimal Control: Teaching assistant

Aug. 2023 – Dec. 2023

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, Shell Script, Julia

Libraries&Toolkits: PyTorch, Huggingface, Gymnasium, Stable-Baselines3, Git, IATEX

Data Visualization Tools: Tableau, Power BI

ACADEMIC SERVICE

Paper Reviewer

Aug. 2021 - Present

• Reviewers of IEEE Systems Journal 2023, ICRA 2023, AAAI 2023, NeurIPS 2024, ICLR 2025, and AISTATS 2025.

Extracurricular Activities

UT Girl Day

Volunteer

Feb. 2023 and Feb. 2024

• Instructed guests of all ages on how to operate an AutoAuto vehicle using basic Python commands. link

REACT REU

Mentor

Aug. 2023

• Instructed undergraduate students to improve real-time computer vision models, excelling in image classification and object detection using Python.

Code2College

Mentor

Jul. 2022 - Present

• Mentored underrepresented high school graduates to prepare for software engineering jobs or college interviews.

Student Council of National Taiwan University

Member of Parliament

Jan. 2019 - May. 2019

• Voiced concern about potential cyber security issues of the electrical voting system.