Po-han Li

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

Education

University of Texas at Austin Aug. 2023 – May 2025 (Leave for Internship)
Ph.D. Candidate in Electrical and Computer Engineering *Texas, U.S.A.*

- Research Interest: multi-modal feature extraction, multi-modal representation learning, data compression, and retrieval. Post-processing and post-training of foundation models (see more details on my Personal Website)
- Decision, Information, and Communications Engineering (DICE) track
- Co-advised by Prof. Sandeep Chinchali and Prof. Ufuk Topcu
- GPA: 3.93/4.00

University of Texas at Austin Aug. 2021 – Aug. 2023
M.S. in Electrical and Computer Engineering *Texas, U.S.A.*

National Taiwan University Sep. 2016 – Jul. 2020
B.S. in Electrical Engineering *Taipei, Taiwan*

- Research Advisor: Prof. Wanjiun Liao (廖婉君)
- 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)

Publications

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

First-Author Publications:

1. **P. Li***, S. Chen*, S. Chichali, and U. Topcu. VIBE: Video-to-text information bottleneck evaluation for TL;DR. *Under review*, 2025
2. **P. Li**, S. Chinchali, and U. Topcu. CSA: Data-efficient mapping of unimodal features to multimodal features. *International Conference on Learning Representations (**ICLR**)*, 2025
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
4. **P. Li**, S. Chinchali, and U. Topcu. Differentially private timeseries forecasts for networked control. *American Control Conference (**ACC**)*, 2023

Other Publications:

1. M. Omama, **P. Li**, and S. Chinchali. Exploiting distribution constraints for scalable and efficient image retrieval. *International Conference on Learning Representations (**ICLR**)*, 2024
2. A. Narayanan, P. Kasibhatla, M. Choi, **P. Li**, R. Zhao, and S. Chinchali. PEERNet: An end-to-end profiling tool for real-time networked robotic systems. In *IEEE/RSJ International Conference on Intelligent Robots and Systems (**IROS**)*, 2024
3. 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
4. Y. Geng, D. Zhang, **P. Li**, O. Akcin, A. Tang, and S. P. Chinchali. Decentralized sharing and valuation of fleet robotic data. In *Conference on Robot Learning (**CoRL**)*, 2021

Work Experience

Meta Platforms, Inc. May. 2025 – Present
Software Engineer Intern @ Monetization GenAI *California, U.S.A*

- Extracted key information from external websites to automate advertisement generation
- Aligned website source code with visual snapshots to improve ad generation quality
- Designed evaluation metrics to assess the effectiveness of unsupervised generated advertisements

Meta Platforms, Inc. May. 2024 – Aug. 2024
Software Engineer Intern @ 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**

Academic Service

Reviewer Aug. 2021 - Present

- Reviewers of AAAI, ICML, NeurIPS, ICLR, AISTATS, CVPR, MLSys, IEEE Systems Journal, IROS, and ICRA.

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.