Po-han Li

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In | Google Scholar

Interests

Machine Learning Researcher with expertise in multimodal foundation models, focusing on model adaptation, inference-time optimization, and robust evaluation pipeline design. Experience includes tackling missing or noisy modalities and integrating heterogeneous data sources to enhance real-world deployments. Proven ability in iterative model improvement and scalable ML system development across research and industry settings.

EDUCATION

University of Texas at Austin

Aug. 2023 – Present (Expected Summer 2026)

Ph.D. Candidate in Electrical and Computer Engineering

Texas, U.S.A.

- 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 – May 2023

Texas, U.S.A.

M.S. in Electrical and Computer Engineering

• Decision, Information, and Communications Engineering (DICE) track

National Taiwan University

Sep. 2016 – Jul. 2020

Taipei, Taiwan

B.S. in Electrical Engineering

- 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. Advances in Neural Information Processing Systems (NeurIPS), 2025
- 2. P. Li, Y. Yang, M. Omama, S. Chinchali, and U. Topcu. Any2Any: Incomplete multimodal retrieval with conformal prediction. *Under review*, 2025
- 3. P. Li, S. Chinchali, and U. Topcu. CSA: Data-efficient mapping of unimodal features to multimodal features. *International Conference on Learning Representations (ICLR)*, 2025
- 4. 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

Other Publications:

- M. Omama, P. Li, and S. Chinchali. Exploiting distribution constraints for scalable and efficient image retrieval. International Conference on Learning Representations (ICLR), 2025
- 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. Chinchali. Decentralized sharing and valuation of fleet robotic data. In *Conference on Robot Learning* (CoRL), 2021

Meta Platforms, Inc.

May 2025 - Aug. 2025

Software Engineer Intern @ Monetization GenAI

California, U.S.A

- Utilized automation tools to extract key information from external websites, supporting ML-driven advertisement generation
- Aligned website source code with visual snapshot analysis, contributing to the design of evaluation pipelines for quality ad generation
- Engineered robust 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

- Calibrated Meta's multimodal foundation AI model for ads ranking
- Analyzed model performance and tracking of iterative training, supporting the development of robust evaluation benchmarks
- Developed highly scalable classifiers and tools leveraging Python and machine learning techniques, incorporating data preprocessing and exploratory analysis
- Adapted standard machine learning methods for distributed clusters, illustrating proficiency in model iteration and integrating heterogeneous data sources

China Network Systems Co., Ltd.

Oct. 2019 – Mar. 2021

Machine Learning and Data Scientist Intern

Taipei, Taiwan

- Analyzed data patterns and built 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

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

Extracurricular Activities

UT Girl Day

Volunteer Feb. 2023 and Feb. 2024

• Taught Python basics using AutoAuto cars; reached 200+ visitors of all ages. 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.