Po-han Li

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EDUCATION

The University of Texas at Austin   Aug. 2021 – Present
MS/Ph.D. in Electrical and Computer Engineering   *Texas, U.S.A.*
- Research Interest: Decentralized Data Sharing, Application of Differential Privacy, Task-aware Data Transmission, and Robust Optimization (see more details on my Personal Website)
- Co-advised by Prof. Sandeep Chinchali and Prof. Ufuk Topcu
- GPA: 3.93/4.00

National Taiwan University   Sep. 2016 – Jul. 2020
B.S. in Electrical Engineering   *Taipei, Taiwan*
- 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 Ministry of Science and Technology (2017-2019)

WORK EXPERIENCE

Research Fellow   Aug. 2020 – Jul. 2021
Center for IoT Innovation at National Taiwan University of Science and Technology   *Taipei, Taiwan*
Python, Tableau, Netlogo

- 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

Machine Learning and Data Scientist Intern   Oct. 2019 – Mar. 2021
China Network Systems Co., Ltd.   *Taipei, Taiwan*
Python, Pytorch, pandas, SQL, Tableau, Shell script

- 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

Research Assistant   Aug. 2019 – Jun. 2020
Prof. Wanjiun Liao's Internet Research Lab, National Taiwan University   *Taipei, Taiwan*
Python, Pytorch

- Enhanced the quality of service (QoS) of multi-view 3D videos by **reinforcement learning**

PUBLICATIONS

1. **Po-han Li**, Sandeep Chinchali, and Ufuk Topcu. Differentially private timeseries forecasts for networked control. *Submission to American Control Conference 2023* **link**

2. **Po-han Li**, Ufuk Topcu, and Sandeep Chinchali. Adversarial examples for model-based control: A sensitivity analysis. *Allerton Conference (accepted)*, 2022 **link**

3. Oguzhan Akcin, **Po-han Li**, Shubhankar Agarwal, and Sandeep Chinchali. Data games: A game-theoretic approach to swarm robotic data collection. In *Conference on Robot Learning*, 2022 **link**

4. Yuchong Geng, Dongyue Zhang, **Po-han Li**, Oguzhan Akcin, Ao Tang, and Sandeep Chinchali. Decentralized sharing and valuation of fleet robotic data. In *Conference on Robot Learning*, 2021 **link**

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, Shell Script, Julia
Libraries&Toolkits: PyTorch, Keras, pandas, CVXPY, NumPy, Git, LaTeX
Data Visualization Tools: Tableau, Power BI