FANGCHEN LIU

https://fangchenliu.github.io/

EDUCATION

University of California, Berkeley Aug. 2020 – Present
Ph.D. in Computer Science

University of California, San Diego Sep. 2018 – Mar. 2020
M.S. in Computer Science

Peking University Sep. 2014 – Jul. 2018
B.S. in Computer Science, Summa Cum Laude
Minor in Economics

PUBLICATIONS

$*$ indicates equal contribution

- The Wisdom of Hindsight Makes Language Models Better Instruction Followers. Tianjun Zhang*, **Fangchen Liu***, Justin Wong, Pieter Abbeel, Joseph E. Gonzalez. *ICML*, 2023
- Chain-of-Thought Predictive Control with Behavior Cloning. Zhiwei Jia, **Fangchen Liu**, Vineet Thumuluri, Zhiao Huang, Hao Su. *ICLR RRL Workshop*, 2023
- Masked Autoencoding for Scalable and Generalizable Decision Making. **Fangchen Liu***, Hao Liu*, Aditya Grover, Pieter Abbeel. *NeurIPS*, 2022.
- Masked World Models for Visual Control. Younggyo Seo, Danijar Hafner, Hao Liu, **Fangchen Liu**, Stephen James, Kimin Lee, Pieter Abbeel. *CoRL*, 2022.
- HARP: Autoregressive Latent Video Prediction with High-Fidelity Image Generator. Younggyo Seo, Kimin Lee, **Fangchen Liu**, Stephen James, Pieter Abbeel. *ICIP*, 2022.
- Towards More Generalizable One-shot Visual Imitation Learning. **Fangchen Liu***, Zhao Mandi*, Kimin Lee, Pieter Abbeel. *ICRA*, 2022.
- SAPIEN: a SimulAted Part-based Interactive ENvironment. Fanbo Xiang, Yuzhe Qin, Kaichun Mo, Yikuan Xia, Hao Zhu, **Fangchen Liu**, Minghua Liu, Hanxiao Jiang, Yifu Yuan, Li Yi, He Wang, Angel Chang, Leonidas Guibas, Hao Su. *oral in CVPR*, 2020
- State Alignment-based Imitation Learning. **Fangchen Liu**, Zhan Ling, Tongzhou Mu, Hao Su. *ICLR*, 2020
- Mapping State Space using Landmarks for Universal Goal Reaching. **Fangchen Liu***, Zhiao Huang*, Hao Su. *NeurIPS*, 2019
- Adversarial Defense by Stratified Convolutional Sparse Coding. Bo Sun, Nian-hsuan Tsai, **Fangchen Liu**, Ronald Yu, Hao Su. *CVPR*, 2019
- Effective Master-Slave Communication On a Multi-Agent Deep Reinforcement Learning System. Xiangyu Kong, **Fangchen Liu***, Bo Xin*, Yizhou Wang. *NIPS Hierarchical Reinforcement Learning Workshop*, 2017
- Revisiting the Master-Slave Architecture in Multi-Agent Deep Reinforcement Learning. Xiangyu Kong, **Fangchen Liu***, Bo Xin*, Yizhou Wang. *arXiv:1712.07305*

- BDD100K: A Diverse Driving Dataset for Heterogeneous Multitask Learning. Fisher Yu, Haofeng Chen, Xin Wang, Wenqi Xian, Yingying Chen, **Fangchen Liu**, Mike Liao, Vashisht Madhavan, Trevor Darrell. *oral in CVPR*, 2020

RESEARCH EXPERIENCE

Multi-modal Imitation Pretraining from YouTube Videos Jun. 2022 – Jan. 2023
with Prof. Anima Anandkumar

Masked Trajectory Autoencoding for Decision Making Feb. 2021 – May. 2022
with Prof. Aditya Grover, Prof. Pieter Abbeel

Unsupervised Skill Discovery with Asymmetric Self-play Oct. 2021 – Feb. 2022
with Prof. Aditya Grover, Prof. Pieter Abbeel

Visual One-shot Imitation Learning Oct. 2020 – Jun. 2021
with Dr. Kimin Lee, Prof. Pieter Abbeel

Ad-hoc Multi-Agent Collaboration Jun. 2020 – Oct. 2020
with Dr. Yuandong Tian

Imitation Learning between Heterogeneous Actors Jul. 2018 – Oct. 2019
with Prof. Hao Su

Task-Oriented Reinforcement Learning and Planning Dec. 2018 – May. 2019
with Prof. Hao Su

WORKING EXPERIENCE

Intern at NVIDIA Research, AI Algorithm Group Jun. 2022 – Jan. 2023
Intern at FAIR, Robotics and Reinforcement Learning Group Jun. 2020 – Aug. 2020
Intern at Microsoft Research Asia, Visual Computing Group Dec. 2017 – Mar. 2018
Intern at SenseTime AI, Face Recognition & Detection Group Sep. 2016 – Mar. 2017

AWARDS AND SERVICES

Reviewer for NeurIPS, ICML, ICLR, CVPR, ECCV, ICCV, ICRA, IROS, L4DC
Honored Bachelor of Science in Peking University, EECS Department Jul. 2018 (30 in 350)
Merit Students in Academic Study 2014 - 2018
Guanghua Scholarship 2015, 2017
TP-Link Scholarship 2016
First-prize in the Chinese Mathematics Competition (Shandong Province) Dec. 2013

SKILLS

Programming: Python, C, C++
Deep Learning: Jax, PyTorch, Tensorflow
Simulation: MuJoCo, Bullet, CoppeliaSim