Haoyu Xiong

haoyu-x.github.io

Email : haoyux@berkeley.edu
Mobile : +86 173-0220-9017

Education

- **Tianjin University** — Tianjin, China
  B.E. in Biomedical Engineering; GPA: 86.55/100 — *Sep. 2017 – Jun. 2021*
- **University of California, Berkeley** — Berkeley, U.S.A.
  Visiting student in EECS; Selected Courses: Deep Unsupervised Learning (A-)by Pieter Abbeel — *Jan. 2020 – May. 2020*

Publication

- [1]: **Haoyu Xiong**, Quanzhou Li, Yun-Chun Chen, Homanga Bharadhwaj, Samarth Sinha, Animesh Garg.
  Learning By Watching: Physical Imitation of Manipulation skills from Human Videos.
  IEEE Int'l Conf. on Robotics and Automation(ICRA), May. 2021 Under Review [Website]

Experience

- **University of Toronto & Vector Institute** — Remotely
  R.A., People, AI, & Robots Lab -Advisor:Animesh Garg — *Mar. 2020 – Present*
  - **Focus**: Unsupervised Representation Learning, Imitation from Human Videos, Robotics
  - **Responsibilities**: Propose and implement an approach for physical imitation from human videos for robot manipulation tasks. Proposed method performs favorably against state-of-the-art approaches.
    Implement a series of Visual Imitation baselines, e.g., GAIL-based methods, AVID.
    Gain in-depth understanding of unsupervised translation models, unsupervised keypoint detection models, pixel-based RL.
- **Tianjin University** — Tianjin, China
  R.A., Deep Reinforcement Learning Lab -Advisor:Jianye Hao — *Jun. 2019 – Present*
  - **Focus**: Goal-Conditioned RL, Imitation Learning
  - **Responsibilities**: Gain in-depth understanding of model-free RL algorithm baselines. Reading and analyzing state-of-the-art work on the topics of goal-conditioned RL/IL
- **Tianjin University** — Tianjin, China
  R.A., TJU NeuroEngineering Lab -Advisor:Xingwei An — *Mar. 2018 – Dec. 2018*
  - **Focus**: Learning-based EEG signal classification

Awards and Honors

- [**2019**]: UC Berkeley Exrension SAF Merit Scholarship
- [**2018**]: Outstanding student Award in Tianjin University
- [**2018**]: National Undergraduate Student Research Fund
- [**2018**]: First Prize in National Mathematics Competition, Tianjin division

Programming Skills

- **Programming**: Python, C
- **Technologies**: Deep RL: OpenAI-gym, DM Control, Robosuite, Deep Learning: Pytorch
- **Languages**: English, Mandarin