Haoyu Xiong

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### **EDUCATION**

## Tianjin University

Tianjin, China

B.E. in Biomedical Engineering; GPA: 86.55/100

Sep. 2017 - Jun. 2021

Email: haoyux@berkeley.edu

### 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

- o 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

- o Focus: Goal-Conditioned RL, Imitation Learning
- $\circ$  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

o 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
- [2016]: First Prize in Chinese Physics Olympiad(CPhO)

#### Programming Skills

• **Programming**: Python, C

• Technologies: Deep RL: OpenAI-gym, DM Control, Robosuite, Deep Learning: Pytorch

• Languages: English, Mandarin