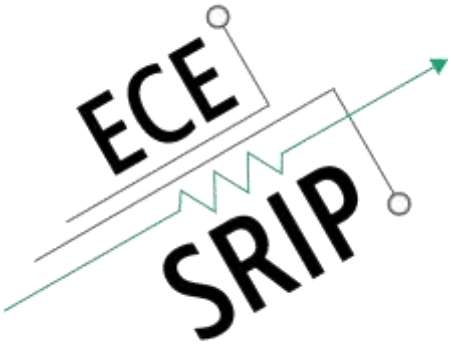


FACULTY MENTOR
Wang, Xiaolong

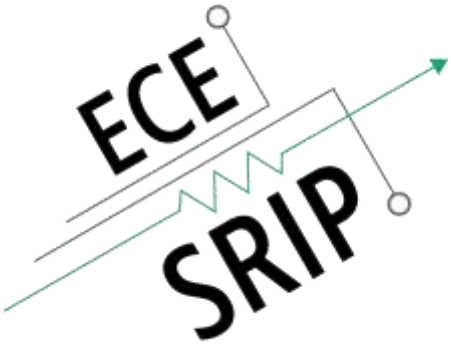
PROJECT TITLE
Vision-based RL for Robotics Manipulation and Control

PROJECT DESCRIPTION
Study on how to train RL policy with vision inputs. The focus is on four aspects: (1) generalization on RL and control; (2) visual imitation learning; (3) learning self-supervised representation; (4) real robot experiments.

This project can accommodate both remote and in-person students

INTERNS NEEDED
3

PREREQUISITES
Skills on dealing with real robots are highly preferred. Strong RL background skills, or strong skills on designing simulation environments, and have interest in vision, students with publications in conferences like NeurIPS/ICML/ICRA are preferred.



FACULTY MENTOR
Wang, Xiaolong

PROJECT TITLE
Learning Explicit 3D Representation from Videos

PROJECT DESCRIPTION
These include three directions of interest: (1) Study explicit 3D/geometry estimation of 3D hand pose, 6D object pose; (2) 3D Mesh reconstruction of general objects from videos; (3) 3D Human body shape synthesis.

This project is remote

INTERNS NEEDED
3

PREREQUISITES
Strong 3D/geometry and computer vision backgrounds, students with publications in conferences like CVPR/ECCV/ICCV are preferred.

FACULTY MENTOR
Wang, Xiaolong

PROJECT TITLE
Self-Supervised Learning with Videos

PROJECT DESCRIPTION
Learning self-supervised features from videos for: (1) general representation; (2) correspondence representation; (3) 3D representation.

This project is remote

INTERNS NEEDED
3

PREREQUISITES
Strong background in computer vision, especially with videos, students with publications in conferences like CVPR/ECCV/ICCV are preferred.