JINGPEI LU

jingpeilu.github.io

EDUCATION

University of California San Diego, CA, USA

Ph.D. in Electrical and Computer Engineering — 2021 - Present
Area of focus: Computer Vision and Robotics
Advisor: Michael C. Yip

M.S. in Electrical and Computer Engineering — 2018 - 2020
Area of focus: Intelligent System, Robotics and Control

B.S. in Electrical and Computer Engineering — 2014 - 2018
Area of focus: Machine Learning

FIELD OF INTERESTS

Robotic Perception; Machine Learning; State Estimation; Surgical Robotics; Computer Vision

PUBLICATIONS

F. Richter, **J. Lu**, R. K. Orosco, M.C. Yip, "Robotic Tool Tracking under Partially Visible Kinematic Chain: A Unified Approach," *IEEE Transactions on Robotics* (T-RO) (Early Access), 2021.

F. Liu, Z. Li, Y. Han, **J. Lu**, F. Richter, M. C. Yip, "Real-to-Sim Registration of Deformable Soft Tissue with Position-Based Dynamics for Surgical Robot Autonomy," in *IEEE Conference on Robotics and Automation* (ICRA), 2021.

J. Lu, A. Jayakumari, F. Richter, Y. Li and M. C. Yip, "SuPer Deep: A Surgical Perception Framework for Robotic Tissue Manipulation using Deep Learning for Feature Extraction," in *IEEE Conference on Robotics and Automation* (ICRA), 2021.

Y. Li, F. Richter, **J. Lu**, E. K. Funk, R. K. Orosco, J. Zhu and M. C. Yip, "SuPer: A Surgical Perception Framework for Endoscopic Tissue Manipulation with Surgical Robotics," in *IEEE Robotics and Automation Letters* (RA-L), vol. 5, no. 2, pp. 2294-2301, April 2020.

TEACHING EXPERIENCE

University of California, San Diego — January 2019 - January 2020
Teaching Assistant, Jacob School of Engineering

· Course: Introduction to Digital Design

TECHNICAL SKILLS

Programming	Python, C/C++, Matlab, Cuda
Tools	Tensorflow, Pytorch, ROS, Git, Docker, LaTeX
Language	Proficient in English and Chinese

SERVICES

Reviewer	IEEE Robotics and Automation Letters (2020, 2021)
Mentor	Engineering Group Design Project (UCSD)
	Summer Research Internship Program (UCSD)