

Yang Yang

📍 1115 W 25th St, Los Angeles, CA 90007 📩 yyang672@usc.edu ☎ +1 213 554 4842

🔗 Personal Website 💬 Linkedin 📚 Google Scholar

Education

University of Southern California

PhD in Mechanical Engineering

Advisor: [Hangbo Zhao](#)

Los Angeles, United States

Aug 2025 – Present

Sichuan University

B.Eng in Mechanics with Honors

Chengdu, China

Sep 2021 – Jun 2025

◦ GPA: 3.83/4.0 (90.31/100)

◦ Courses: Theoretical Mechanics, Material Mechanics, Mathematical Methods in Engineering, Continuum Mechanics, Structural Mechanics, Fluid Mechanics, Computational Mechanics, Experimental Mechanics, Vibration Mechanics

Research Interests

My research interests are in Soft Robotics, Sensors, and Mechanics. They encompass tactile sensing, computational mechanics, and multi-model sensors. I am particularly interested in the design of new types of sensors and their application in soft robotics.

Experience

The Chinese University of Hong Kong

Research Assistant, advised by [Hongliang Ren](#)

Hong Kong SAR, China

Oct 2024 – May 2025

Tsinghua University

Summer Research Intern, advised by [Wenbo Ding](#)

Shenzhen, China

Jun 2024 – Aug 2024

Sichuan University

Teaching Assistant, advised by [Hong Zhang](#)

Chengdu, China

Feb 2024 – Jun 2024

Shanghai Jiao Tong University

Summer Research Intern, advised by [Daolin Ma](#)

Shanghai, China

Jun 2023 – Aug 2023

Honors and Awards

USC Viterbi School of Engineering Graduate School Fellowship	2025
Top 100 Undergraduate Students of Sichuan University	2025
Second Prize of Academic Scholarship at Sichuan University	2024
First Prize of Sichuan Province Mechanics Competition Individual Race	2023
First Prize of Sichuan Province Mechanics Competition Group Race (Leader)	2023
First Prize of Academic Scholarship at Sichuan University	2023
Outstanding Students of Sichuan University	2023

Publications

Conformable Vision-Based Tactile Sensor with Enhanced Soft Elastomer Design for Palpating Irregular Anatomical Surfaces

Yang Yang, Tao Zhang, Yupeng Wang, Wenchao Yue, Tangyou Liu, Hongliang Ren

International Conference on Biomimetic Intelligence and Robotics (ICBIR) 2025, [Paper]

Vitire: A Bimodel Visuotactile Tire with High-Resolution Sensing Capability

Shoujie Li[†], Jianle Xu[†], Tong Wu, **Yang Yang**, Yanbo Chen, Xueqian Wang, Wenbo Ding, Xiao-ping Zhang
IEEE Transactions on Mechatronics, [\[Paper\]](#)

Three-dimension Tip Force Perception and Axial Contact Location Identification for Flexible Endoscopes using Tissue-compliant Soft Distal Attachment Cap Sensors

Tao Zhang[†], **Yang Yang[†]**, Yang Yang, Huxin Gao, Jiewen Lai, Hongliang Ren

International Conference on Robotics and Automation (ICRA 2025), [\[Paper\]](#)

Machine Learning-and Finite Element-Based Temperature-and Rate-Dependent Plasticity Model: Application to the Tensile Behavior

Bo Zhang, **Yang Yang**, Hao Wu, Yida Zhang, Quanyi Wang, Hong Zhang, Yongjie Liu, Qingyuan Wang
Journal of Materials Engineering and Performance, [\[Paper\]](#)

A deep learning approach for low-cycle fatigue life prediction under thermal-mechanical loading based on a novel neural network model

Yang Yang, Bo Zhang, Hao Wu, Yida Zhang, Hong Zhang, Yongjie Liu, Qingyuan Wang
Engineering Fracture Mechanics, [\[Paper\]](#)

Skills

Programming: C++, Python (Pytorch)

Platform/System: Finite Element Method, SolidWorks, MATLAB, Ubuntu, Linux, VS Code, Gazebo, ROS

Languages: Mandarin (Native), English (Fluent)