Department of Electrical and Computer Engineering

TEXAS TECH UNIVERSITY
Edward E. Whitacre Jr.
College *of* Engineering

Spring 2025 Seminar Series

Seminar Title: ***Hybrid bioprinting (Hybprinting) for multi-functional interface engineering***

Time: 2:00-2:50 PM, Monday, Feb. 3, 2025
Location: ECE 101

Speaker:
Jiannan Li
Stanford University

Abstract:
Tissue engineering aims to develop biological substitutes for restoring or enhancing tissue function, while multi-functional tissue interfaces engineering faces significant challenges due to their diverse mechanical, topographical, and biological properties. Dr. Jiannan Li's research focuses on developing advanced multi-functional bioprinting techniques, the hybrid bioprinter (Hybprinter), to address these challenges. The printing technology enables seamless integration of soft-rigid materials covering a range of mechanical properties spanning six orders of magnitude, as well as the ability to pattern hundreds of different biological cues. The study proposes leveraging the Hybprinter to effectively recapitulate native tissues, offering novel opportunities for applications in multi-tissue engineering, cancer research, as well as human-machine interface engineering.

Speaker Bio:
Dr. Jiannan Li is currently a postdoctoral fellow at Stanford University. He obtained Ph. D. and M. S. degrees in Electrical and Computer Engineering at University of California, Davis, and B. S. in Microelectronics and Nanoelectronics at Tsinghua University. Jiannan dedicates himself to developing advanced bioprinting technologies. The printing system he developed was replicated and applied to 7 facilities worldwide for collaborations. He has published more than 20 peer-reviewed journal articles including Biomaterials, Analytical Chemistry, Lab on a Chip. His work was awarded Stanford MCHRI postdoctoral fellowship, and UC Davis ECE excellence in research award.