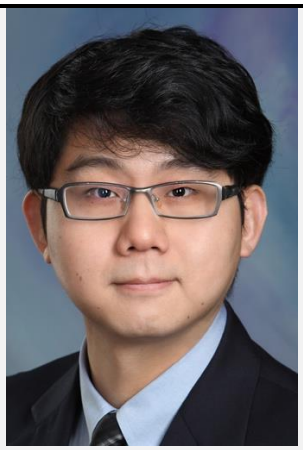

Assistant Professor, Jia Liu

Harvard University, USA

Professor Liu received his Ph.D. in Chemistry from Harvard University in 2014 and completed postdoctoral training at Stanford University in 2018. He joined Harvard School of Engineering and Applied Sciences as an Assistant Professor in 2019. At Harvard, his lab develops tissue-integrated intelligent bioelectronic systems that merge flexible and soft electronics with living tissues, and combine multimodal in situ characterization with deep learning and agentic AI to decode and control biological processes. His research spans tissue-like bioelectronics and cyborg organoids to AI-driven multimodal analysis and tissue functional control for understanding neural dynamics, organ function, and disease mechanisms. Professor Liu has pioneered new paradigms in bioelectronics, establishing foundations for soft electronic materials, nanoarchitectures for tissue-like electronics, and AI-integrated bioelectronic systems. His work was recognized as a milestone in bioelectronics by *Science* (2013, 2017) and was selected among Top 10 World-Changing Ideas and Most Notable Chemistry Research (2015). He has received numerous honors, including MIT Technology Review's "Innovators Under 35" (Global List), the AFOSR Young Investigator Program (YIP) Award, the NIH/NIDDK Catalyst Award (from the NIH Director's Pioneer Award Program), the William F. Milton Award, and the Aramont Award for Emerging Science Research Fellowship. Professor Liu is also a cofounder and scientific advisor of several deep-tech startups translating his lab's innovations into practice, including Axoft, Elastro, MorphMind (AIScientist), and NanoRythmics.