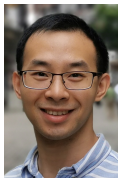
Fei PAN (潘飞)



Department of Biomedical Engineering, City University of Hong Kong, Hong Kong SAR
fei.pan@my.cityu.edu.hk ⋄ starfarming.top ⋄ Chinese, male, married

EDUCATION

City University of Hong Kong, China — Sept. 2016 - Present
Ph.D. candidate in Biomedical Engineering

Xi'an Jiaotong University, China — Sept. 2013 - Jun. 2016
Master of Engineering in Aircraft Design

Ecole Centrale de Lille, France — Sept. 2011 - May 2013
Diplôme d'ingénieur (Master of Engineering) in General Engineering

Xi'an Jiaotong University, China — Sept. 2009 - Jul. 2011
Bachelor of Engineering in Aircraft Design & Engineering

RESEARCH PROJECTS

Robotic Microinjection of Adherent Cells (*at* CityU)
I developed a vision-guided robotic microinjection system for adherent cells. I wrote a Qt/C++ software to coordinate a 3-DOF micromanipulator and a 2-DOF microscope stage to inject detected cells in the optimal Hamiltonian path. Ongoing improvements include detecting stain-free cells with deep learning and synchronization of multiple micromanipulators. My system is used to perform cellular research on CRISPR/Cas9 gene editing (knock-in/knock-out).

Shape Optimization of Curvilinear Blade-stiffened Panels (*at* XJTU)
I developed a shape optimization framework for curvilinear blade-stiffened panels in which Abaqus/Standard is served as the finite element solver, CATIA for structural modeling, and Isight as the optimizer. My framework can be used to design multi-functional aircraft structures like pressurized fuselage structures subjected to complex loading cases.

ACADEMIC ACHIEVEMENTS

F. Pan, S. Chen, Y. Jiao, *et al.*, "Automated High-Productivity Microinjection System for Adherent Cells," *IEEE Robotics and Automation Letters*, vol. 5, no. 2, pp. 1167–1174, Apr. 2020

F. Pan, S. Chen, Y. Jiao, *et al.*, "Automated High-Productivity Microinjection System for Adherent Cells," in *2020 IEEE International Conference on Robotics and Automation*, Paris, France, May 2020

WORK EXPERIENCE

City University of Hong Kong — Sept. 2017 - Dec. 2018
Teaching Assistant of the course "Mechanics of Materials" of $\sim$ 20 students for three semesters

Adeo Group (No. 1 house DIY retailer in Europe) — May 2013 - Aug. 2013
Java Web Application Development Intern (On-site internship)
I improved an internal Java web application (based on Spring Framework) dedicated to collect employees' feedback

LOG VAD (A logistics company in France and Belgium) — Jan. 2012 - Feb. 2012
Worker (On-site internship)
I worked as a real worker.

MISCELLANEOUS

Languages	English (professional), Français (débutant)
Biology	Adherent cell culture technique
Micro-fabrication	Common micro/nano manufacturing process
Translation	*Mécanique des Mécanismes* translated to Chinese → here

Last updated: June 4, 2020