

# Xuzhou (Sam) Jiang

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## EDUCATION AND CAREER

### Georgia Institute of Technology

Postdoctoral Fellow      *Georgia Tech Manufacturing Institute*  
| Oct. 2017 - Now

### Hong Kong University of Science and Technology

Doctor of Philosophy      *Mechanical Engineering*  
| Sep.2011 - Nov.2016

### Zhejiang University

Bachelor in Engineering      Major: Process Equipment & Control  
*Chemical Engineering & Bioengineering*      | Sep.2006 -Jun.2010

## RESEARCH INTERESTS

Cell Manufacturing | Structural Health Monitoring | Composite Joining and Repair  
Self-Powered Devices | Tactile Sensors | Wearable Devices | Nano-Fabrication of Materials

## RESEARCH EXPERIENCE

### Georgia Institute of Technology

Supervisor: **Prof. Chuck Zhang** (School of Industrial & Systems Engineering and Georgia Tech Manufacturing Institute)

**Postdoctoral Fellow** | Oct.2017 - Now

- **Marcus Center Project:** An all-printed wireless, distributed sensor array platform for in-line, continuous monitoring of cell culture conditions in scale-up bioreactors
- **CMaT Supplement:** Development of real-time biosensors for monitoring cell and culture attributes during manufacturing
- **FDA Project:** Data enabled automation for the improved efficiency, yield, and reproducibility of the manufacturing of human umbilical cord tissue mesenchymal stromal cells for clinical therapeutic use
- **Delta Airline Project:** Advanced sensing, non-destructive evaluation and materials quantification for composite aircraft repair
- **NSF CPS/Synergy/Collaborative Research:** Cybernizing mechanical structures through integrated sensor-structure fabrication
- **NextFlex Project 2.5:** Development of test methods and standards to assess reliability of the components and systems

### Hong Kong University of Science and Technology

Supervisor: **Prof. Tong-Yi Zhang** (Membership of the Chinese Academy of Sciences)  
Co-supervisor: **Prof. Zhiyong Fan** (Department of Electronic and Computer Engineering)  
**Ph. D.** | Sep.2011 - Nov.2016

- **Self-powered waterproof tactile sensor array**
- **Theoretical modeling and derivation of triboelectric devices**
- **Systematic study of design parameters of triboelectric devices**
- **Electrospinning of piezoelectric fibers**

#### Zhejiang University

Supervisor: **Prof. Jin-Yang Zheng** (Chang Jiang Scholar)

**Ph. D. student** | Sep.2010 - Jun.2011

**Undergraduate dissertation** | Sep.2009 - Jun.2010

- **Theoretical analysis of slow crack growth of polyethylene**
- **Undergraduate thesis: Research on buried pipe reinforced by cross helically wound steel wires subjected to foundation settlement**

Supervisor: **Prof. Lei Jiao**

**11th students' research training program (SRTP)** | Sep.2008 - Jun.2009

- **The development of magnetic driving equipment testing system**