# **ZLIIAN WU**

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# **Objective: Seeking MSE Advisor**

### **EDUCATION**

### University of Electronic Science and Technology of China (UESTC)

Sept.2016-Jul. 2020

Bachelor of Engineering in Mechanical Design, Manufacturing and Automation

**GPA**: 3.76/4.0(86/100) **Rank:** 10%/210

#### **Awards and Distinctions**

•	International Genetically Engineered Machine Competition Gold Award (Intl.)	11/2019
•	International Genetically Engineered Machine Competition Gold Award & Best Energy	11/2018
	Project (Intl.)	
•	Excellent Student Carder (UESTC)	06/2018
•	2 <sup>nd</sup> Prize of 18 <sup>th</sup> UESTC Mathematical Modelling (UESTC)	05/2018
•	Excellent Volunteer (UESTC)	12/2017
•	Excellent Member of Student Union (UESTC)	05/2017

#### **Publications**

 Yanli Gong, Hai Jiang, Yunfei Bai, Zijian Wu, Bei Peng, Xuan Weng, "Numerical Studies of Electrokinetically Controlled Concentration of Diluted DNA Molecules in A T-Shaped Microchannel", IEEE Access, vol. 8, pp. 5601-5610, Dec. 2019.

#### PROFESSIONAL EXPERIENCE

# University of Electronic Science and Technology of China

07/2020-Present

Research Assistant, School of Automation Engineering

Vision Measuring and Learning Laboratory, PI: Prof. Zheng Yali

- Developing intelligent vision system for SMT machine to realize automatic picking, precise positioning and posture correction of electronic components to be mounted;
- Optimizing the system using objective recognition and image segmentation algorithms;
- Fabricated machine body and writing host computer program.

### PROJECT EXPERIENCE

# Paper-based Nano Electrochemical Biosensor for Rapid Detection of Food Allergens

10/2019-06/2020

Final Thesis Project, UESTC, CHN

Lab: Micro/Nano Manufacturing Laboratory, PI: Prof. Weng Xuan

- Designed and fabricated the paper-based microfluidics chip;
- Prepared and characterized of two-dimensional black phosphorus nanosheets;
- Explored the mechanism of nano-enhanced adapter-antigen immune response.

#### iGEM Contest Project - Ciprofloxacin Fluorescence Detection Instrument

03/2019-11/2019

Advisor, UESTC, CHN & Boston, USA

- Provided ideas and methods for mathematical modeling;
- Established fluorescence detective device test system and optimized mechanical structure;
- Nominated Best in Hardware Category.

### Automatic Dough Kneading Machine Based on 6-DOF Parallel Robot

09/2019-10/2019

Individual Project, UESTC, CHN

- Released communication between various modules;
- Designed movement path and expected function & programming.

# ADDITIONAL SKILL

Programming: C/C++, Qt, OpenCV, MATLAB

Software: SolidWorks, AutoCAD, ANSYS, COMSOL, SPSS