# YANGLANG YUAN

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### **EDUCATION**

Southern University of Science and Technology

Southern University of Science and Technology

Sept. 2021 - June 2023(Expected) Shenzhen, China

M.Sc. in Electronic Science and Technology

Sept. 2015 - June 2019

B.Eng. in Mechanical Engineering

Shenzhen, China

## **PUBLICATIONS & PATENTS**

### **Patents**

- · Yanglang Yuan, Jiahui Zhang, Xiaoyu Zhang, Fan Zhou, Yajun Wang, Hui Li, Haijiang Wang. Fuel cell bipolar plate and fuel cell: CN, 110459780A[P]. 2019-11-05.
- · Yanglang Yuan, Jiahui Zhang, Xiaoyu Zhang, Fan Zhou, Yajun Wang, Hui Li, Haijiang Wang. Fuel cell bipolar plate and fuel cell: CN, 210429963U[P]. 2019-07-25.

### RESEARCH EXPERIENCES

## Intelligent Manufacturing Lab at SUSTech

July 2021 - Present

Advisor: Prof. Yiming (Kevin) Rong, Prof. Yongsheng Ma

Shenzhen, China

· Researching for Customer-to-Manufacturer(C2M)

Data driven intelligent manufacturing system;

C2M manufacturing system model with universality and completeness;

3D printing sneakers based on C2M scene.

## Shenzhen Key Laboratory of Hydrogen Energy

June 2017 - June 2019

Shenzhen, China

Advisor: Prof. Haijiang Wang

A Bipolar Plate Design for Fuel Cell

Mechanical structure design of a novel bipolar plate for fuel cell unmanned aerial vehicle (UAV); Simulated in SolidWorks and COMSOL for the static and dynamic analysis.

A Controlling System for Fuel Cell

Designed the control logic and methods & controller of the fuel cell system;

Designed the temperature and voltage patrol detection system of Fuel Cell.

Thesis topic: Controlling System of the fuel cell in unmanned aerial vehicle (UAV)

## Seoul National University - SUSTech Research Program

Advisor: Prof. Keyang Tang

Shenzhen, China

Dec. 2017 - Jan. 2018

### International Winter Undergraduate Research Experience

Worked in mixed teams with Seoul National University students to complete specific research tasks; Analysis on the development of intelligent manufacturing industry;

Brief hypothesis of integrated system for design, manufacture and maintenance of shared bicycle.

## Robotics and Autonomy Lab at Tsinghua University

June 2017 - Aug. 2017

Advisor: Prof. Chenglong Fu

Beijing, China

## Summer Undergraduate Research Project

Participated in the design and manufacturing of robot Bluetooth communication controller; Other advanced knowledge in Robotics.

## Formula Student Electric China Program

Advisor: Prof. Yiming (Kevin) Rong

Shenzhen, China

2016 - 2017

· The Controlling System of Electric Racing

Jan. 2017 - Aug. 2017

Designed the control logic and methods of the electric racing; Built the high voltage and low voltage circuits of the racing.

· Battery Management System(BMS) of Electric Racing

June 2016 - Jan. 2017

Research on control strategy of battery management system;

Designed and built the temperature and voltage detection circuit of battery management system.

#### TEACHING EXPERIENCE

## **Advanced Manufacturing Systems**

Teaching Assistant

Feb. 2022 - June 2022 Shenzhen, China

· The primary goal of this course is to impart to the student an understanding of advanced systems for the production of mechanical components using the latest technologies and methods and to enable the student to analyze systems for the production of mechanical components using modern advanced processes and technologies. Discussions are presented related to the system integration of computer-aided design (CAD), computer-aided engineering (CAE), computer-aided manufacturing (CAM), robotics, material resource planning, tool management, information management, process control, quality control, etc.

# Awareness Practices of Manufacturing Engineering

Teaching Assistant

Sept. 2021 - Jan. 2022 Shenzhen, China

- · This is an awareness practice course to gain some basic knowledge of fundamental manufacturing principle and methods through learning and operating typical manufacturing equipment, such as Numerical Controlled (NC) machine tools, measurement devices, additive manufacturing (3D printing) machines, etc. Students are expected to establish an understanding of basic manufacturing methods and operations as well as the concept of quality. It is a foundation for further learning in related engineering disciplines.
- · Responsible for preparation of equipments, data analysis, and presentation of results and conclusions of the students' course projects.

## **SKILLS**

Certificate GCDF

**Programming** Proficient: MATLAB, Plant Simulation; Intermediate: C/C++, Java

**Technical Tools** LATEX, Solidworks, 3D-printing, CAM, Altium Designer, etc

Language Chinese, Cantonese, English

## HONORS AND AWARDS

Excellent Teaching Assistant, SUSTech	2022
Employee of the Year, SUSTech	2021
Outstanding Graduation Thesis, SUSTech	2019
First-Class Honors Graduate of Zhicheng Residential College, SUSTech	2019
Self-improvement Star of Zhicheng Residential College, SUSTech	2019
National Encouragement Scholarship, China	2018
Outstanding Leadership of Zhicheng Residential College, SUSTech	2016 - 2018
Winning Award of Formula Student Electric China	2017