YANGLANG YUAN

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EDUCATION

Southern University of Science and Technology

Sept. 2021 - June 2024 (Expected)

M.Sc. in Electronic Science and Technology

Shenzhen, China

Southern University of Science and Technology

Sept. 2015 - June 2019

B.Eng. in Mechanical Engineering

Shenzhen, China

PUBLICATIONS & PATENTS

Journal Papers

- · Shiquan Ling, Yanglang Yuan, Danqi Yan, Yuquan Leng, Yiming Rong, George Q. Huang. (2022). "RHYTHMS: Real-time Data-driven Human-machine Synchronization for Proactive Ergonomic Risks Mitigation in the Context of Industry 4.0 and Beyond", SSRN Electronic Journal. doi: 10.2139/ssrn.4153658.
- · Yanglang Yuan, Daqiang Guo, Shiquan Ling, Jingke Wang, Guyue Zhou, Yiming Rong, Yongsheng Ma. (2022). "A framework for Customer-to-Manufacturer (C2M) in the context of Industry 5.0" (To be Submitted)

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

Shenzhen, China

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

Researching for Customer-to-Manufacturer(C2M)

Data-driven intelligent manufacturing systems;

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

Advisor: Prof. Haijiang Wang

Shenzhen, China

· 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 the unmanned aerial vehicle (UAV)

Seoul National University - SUSTech Research Program

Dec. 2017 - Jan. 2018 Advisor: Prof. Keyang Tang Shenzhen, China

· International Winter Undergraduate Research Experience

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

Brief hypothesis of an integrated system for design, manufacture and maintenance of the 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 a robot Bluetooth communication controller; Other advanced knowledge in Robotics.

Formula Student Electric China Program

2016 - 2017

Advisor: Prof. Yiming (Kevin) Rong

Shenzhen, China

• The Controlling System of Electric Racing

Jan. 2017 - Aug. 2017

Designed the control logic and methods of 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 the control strategy of the battery management system;

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

TEACHING EXPERIENCE

Advanced Manufacturing Systems

Feb. 2022 - June 2022

Teaching Assistant

Shenzhen, China

· Responsible for introducing 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

Sept. 2021 - Jan. 2022

Teaching Assistant

Shenzhen, China

· Responsible for preparation of equipment, 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** Solidworks, AutoCAD, CNC, Altium Designer, LaTeX, Markdown, etc.

Language Chinese, Cantonese, English

HONORS & AWARDS

Outstanding Postgraduate Student, SUSTech	2022
Excellent Postgraduate Teaching Assistant, SUSTech	2021 - 2022
Employee of the Year, SUSTech	2021
Outstanding Graduation Thesis, SUSTech	2019
Honorary 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