

YANGLANG YUAN

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EDUCATION

Aalto University PhD in Mechanical Engineering	July 2024 - Present Helsinki, Finland
Southern University of Science and Technology M.Sc. in Electronic Science and Technology	Sept. 2021 - June 2024 Shenzhen, China
Southern University of Science and Technology B.Eng. in Mechanical Engineering	Sept. 2015 - June 2019 Shenzhen, China

PUBLICATIONS & PATENTS

Journal Papers

- **Yanglang Yuan**, Jingke Wang, Guyue Zhou, Yiming Rong, Yongsheng Ma. (2024). “A framework and implementation of the Customer-to-Manufacturer (C2M) paradigm”, *Advanced Manufacturing*. doi: 10.55092/am20240004
- 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”, *Robotics and Computer-Integrated Manufacturing*. doi: 10.1016/j.rcim.2023.102709
- **Yanglang Yuan**, Daqiang Guo, Shiquan Ling, Jingke Wang, Guyue Zhou, Yiming Rong, Yongsheng Ma. (2023). “A framework for Customer-to-Manufacturer (C2M) in the context of Industry 5.0” (*Under Review*)

Conference

- **Yanglang Yuan**, Jingke Wang, Kang Tang, Guyue Zhou, Yiming Rong, Yongsheng Ma. (2023). “A framework and implementation of Customer-to-Manufacturer (C2M) paradigm in e-Commerce” (*NSFC-RGC Conference 2023, Hong Kong*)

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 <i>Advisor: Prof. Yiming (Kevin) Rong, Prof. Yongsheng Ma</i>	July 2021 - Present Shenzhen, China
• 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 <i>Advisor: Prof. Haijiang Wang</i>	June 2017 - June 2019 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 UAV

Formula Student Electric China Program

2016 - 2017

Advisor: Prof. Yiming (Kevin) Rong

Shenzhen, China

· **The Controlling System of Electric Racing**

Jan. 2017 - Aug. 2017

In charge of the electronic part of the racing car; Designed the control logic and methods of electric racing;
Bulit the Battery Management System(BMS) of electric racing.

TEACHING EXPERIENCE

Advanced Manufacturing Systems

Feb. 2022 - June 2022

Teaching Assistant

Shenzhen, China

- Responsible for introducing computer-aided design (CAD), computer-aided manufacturing (CAM), 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

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

Excellent Graduate with a Postgraduate Degree, SUSTech

2024

Award of Outstanding Morality, SUSTech

2024

Outstanding Postgraduate Student, SUSTech

2022 - 2023

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

Outstanding Student Representative of Student Congress, SUSTech

2017

Third-Class SUSTech Scholarship for Outstanding Student

2015-2017