# **Zichen Wang**

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2200 Fuller Rd., Ann Arbor, Michigan | MI 48105

## **EDUCATION** University of Michigan

GPA: 4.0/4.0

Ann Arbor, MI 2019 - Dec 2020

M.S. in Design Science

· Coursework: Analytical Product Design, +Impact Studio, Cognitive Ergonomics, Design Process Models, Design Thinking, Global Manufacturing, Intellectual Property Law, Branding Strategy, Behavior Research in Marketing

## University of Michigan-Shanghai Jiao Tong University (UM-SJTU) Joint Institute

Shanghai, China

B.S. in Mechanical Engineering

2015 - 2019

Academic Excellence Scholarship of SJTU for 2016-2017

## **PROJECT**

### **Romu In-house Composting Bin**

Ann Arbor, MI

Team Leader

Sep - Dec 2019

**RESEARCH** 

- · Conceptualized and sketched composting bin for collecting and shredding compostable food scraps to accelerate composting process; Designed app in Figma to provide pick-up service and education on composting for users
- Prototyped and built CAD in Solidworks; Programmed motion sensor in Arduino for automatic lid opening
- Conducted engineering functional/conjoint/marketing/financial analysis, Pro Forma projection, DFEMA analysis, cost analysis with BOM to validate design concepts and make business plan

## **Origami-based Transformable Wheel Robot**

Team Leader

Shanghai, China May - Dec 2018

- Designed and prototyped three soft robots with Origami-structured transformable wheels; Developed unique fabrication methods with 3D printing and sewing to simulate Origami-performance
- Designed new Origami pattern to realize multi-modes wheel transformation on special terrain
- Built 3D wheel model in MatLAB for qualitative analysis on transformation mechanism
- Won Silver Award of 2018 Winter Design Expo

## **Beverage Adding robot**

Designer & Coordinator

Shanghai, China Jun - Aug 2016

- Designed and built automatic beverage serving robot with app for remote control
- Made GD&T and CAD in Solidworks; Prototyped by 3D printing and laser cutting
- Won Best Innovation Prize of 2016 Summer Design Expo

# INTERNSHIP European Union Chamber of Commerce in China (EUCCC)

Shanghai, China 2018 - May 2019

Government Affair Assistant

- · Conducted regulatory and marketing research for auto components and satellites industries
- · Generated bilingual drafts of EUCCC Auto Components Position Paper 2019 for lobbying with governments; Drafted GNSS. Asia Country Profile 2019 for UN satellites project
- · Coordinated and translated management-level meetings between companies and governments in Auto Components, GNSS, CSR, Heating, R&D, Human Resources sections

#### Siemens Ltd., China

Director of Graduation Party

Procurement Assistant in Power and Gas Division

Shanghai, China 2017- Jun 2018

- Worked in strategy making and negotiation with vendors for localization projects
- Coordinated between engineering and business teams for project development
- · Generated, managed supplier base, and executed purchasing order placement

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# **LEADERSHIP Graduation Season, UM-SITU Joint Institute**

Shanghai, China

Jun - Aug 2019

- TEAMWORK Planned and directed 2019 Graduation Party Performance for all graduates and staffs in Joint Institute
  - Executed and sent gift to Joint Institute on Graduation Ceremony, representing all 2019 graduates

# **Entrepreneurship Competition, UM-SJTU Joint Institute**

Shanghai, China

Team Leader

Jan - Apr 2018

· Entered final competition as one of top ten business plans, with plan of in-house storage management system

## Student Union, UM-SJTU Joint Institute

Vice Director of Entertainment Department

Shanghai, China 2015 - 2017

· Planned and organized various annual events for 500+ students: Welcome Party, Christmas Ball, etc.

#### **SKILLS**

- Design: UG NX, Solidworks, AutoCAD, GD&T | Figma UX | FMEA, DOE
- Manufacturing: 3D Printing, CNC Machining, Turning, Milling, Drilling
- **Software:** Matlab, SPSS | Adobe Pr | Office
- Programming Languages: C, C++, Latex, Arduino, Python