# Mengying "Cathy" Fang

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#### **EDUCATION**

Carnegie Mellon University | Pittsburgh, PA
B.S. in Mechanical Engineering | May 2020
Minor in Human-Computer Interaction and Physical Computing
GPA: 3.63/4.0

## **RELEVANT EXPERIENCE**

# Shanghai Tangdi Information Technology Co., Ltd

Structure Intern of Mobile Robots Team | Shanghai, China | June 2017

- Designed robot parts in SolidWorks and constructed engineering graphs.
- Researched and analyzed mobile robots in the global and national market.

# PROJECTS | RESEARCH

# Textural Gradient Rendering Device Design | Fall 2017

• Research and design a 2-DOF haptic rendering device based on an audio loudspeaker.

## Efficient Cooking System Design, Engineer Without Boarders | Spring 2017 - present

- Research and analyze alternative energy resources for better cooking system in Nyadire, Zimbabwe.
- Organize engineering outreach project at Avonworth middle school.

#### Face Tune, Hack 112 Top 10 Project | Spring 2017

Created a game that uses face recognition to compose music.

## P.O.N.D., 15-112 Term Project | Spring 2017

Created an interactive platform that allows users to animate objects from paintings.

## Mousetrap Car, Intro to Mechanical Engineering | Fall 2016

 Designed and built a mousetrap-powered car that runs 17 ft in 8 sec forward and back. Third place in section.

#### ADDITIONAL EXPERIENCE

Teaching Assistant, Carnegie Mellon University | Fall 2017

TA of 15-112 Fundamentals of Programming and Computer Science and Physics I for Engineering Students

#### **LEADERSHIP**

President, Design for America @ CMU | Spring 2017 - present

- Oversee student-led teams that work closely with local community organizations to identify challenging social issues.
- Organize IMPACT CMU, a social-good expo that showcases student involvement in initiating social changes.

## Sophomore representative, Student Advisory Council | Fall 2017

 Conduct Townhall meetings to improve mechanical engineering curriculum and the mechanical engineering department.

# First-year Representative, Partners Allied in Civic Engagement | Fall 2016-Spring 2017

• Promoted civic engagement opportunities programming to the first-year class.

SKILLS

Software SolidWorks Adobe CC

## **Programming**

Python Arduino HTML/CSS

#### Hands-on

Laser Cutter Soldering Lathe Mill

## Languages

Mandarin English

#### **ACTIVITIES**

American Society of Mechanical Engineers Fall 2017

1 all 2017

Society of Women

**Engineers** 

Fall 2016-present

All University Orchestra

Fall 2016-present

Scotch'n'Soda Theatre

Group Spring 2017

CMU Design League

Fall 2017