# SUYU LUOHONG (NAME ON PASSPORT: HONGSUYU LUO)
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## EDUCATION

**COLUMBIA UINVERSITY**  
**Major:** Mechanical Engineering  
    **GPA:** 3.88/4

**New York, NY**  
Sep 2023 - Present

**UNIVERSITY OF PITTSBURG**  
**Major:** Mechanical Engineering; **Minor:** Computer Science  
    **GPA:** 3.96/4

**Pittsburgh, PA**  
Sep 2021 - May 2023

  **Honors:** Dean's Honors (Spring 2022); Term Honor (Fall 2021& Spring 2022)

**SICHUAN UNIVERSITY**  
**Major:** Mechanical Engineering  
    **GPA:** 3.6/4

**Sichuan, China**  
Sep 2019 – Jul 2021

  **Honors:** Monomial First-class Scholarships of Sichuan University (5%); Third-class Scholarship of Sichuan University

## PROJECT & RESEARCH EXPERIENCE

**BISTABLE COMPLIANT FISH ROBOTS RESEARCG PROJECT**  
*Team member*

**New York, NY**  
Sep 2023 – May 2024

This research examines a unique robotic fish swimming pattern, the Hair Clip Mechanism (HCM). The project involves designing the robot, conducting swim tests, and using Comsol for simulation. My role focuses on replicating real-world robot motions with simulation, especially the HCM swimming pattern. I analyzed the robot's forces, torques, and efficiency, and create an efficiency-Strouhal plot for analysis.

**3D RECONSTRUCTION Research**  
*Team member*

**Pittsburgh, PA**  
Jan 2023 – Jun 2023

Remotely participated in Professor Jinghua's visual algorithms team, focusing on research related to 3D reconstruction from single views through deep learning methods. My primary role included running test datasets using the OpenMVS library and verifying test point cloud result.

**MECHANICAL DESIGN 2 TEAM PROJECT**  
*Team Leader*

**Pittsburgh, PA**  
Jan 2022 – Mar 2022

Designed the high-speed shaft for the transmission of a small industrial mixing apparatus. Found the appropriate parts supplier and used SolidWorks to make models and the overall layout drawing. Calculated manufacturing costs and presented the project report

## MISCELLANEOUS EXPERIENCE

**TEACHING ASSISTANT EXPERIENCE**  
*Student Grader for Professor John Whitefoot*

**Pittsburgh, PA**  
Sep 2022 – Dec 2022

Assist the professor in completing the grading of the lab report of Mechanical Measurement 2 and guide the students on how to write lab reports

**MUSIC CLUB OF SICHUAN UNIVERSITY**  
*Member*

**Chengdu, China**  
Sep 2019 - Jul 2021

Promoted club events and participated in school musical shows as an instrumentalist

## SKILLS

Computer Skills: MATLAB, SolidWorks, Comsol, Python, C, Java, OpenCV  
Languages: Chinese, English, Japanese  
Github Link: https://github.com/Luohongsuyu