

XIAOYAO GAO

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EDUCATION

Rice University, Houston, TX

August 2017 – May 2021

Bachelor of Science in Mechanical Engineering with Engineering Design Minor

GPA: 3.8/4.0

Relevant Coursework:

- Multivariable Calculus, Differential Equations in Science and Engineering, Materials Science, Engineering Mechanics, Prototyping and Fabrication, Thermodynamics, Industrial Processing

PROJECTS

Hot Air Balloon for Children's Museum of Houston

September 2017 – May 2018

- Designed and constructed hot air balloon exhibit for the Children's Museum of Houston in a team of 5
- Acted as team liaison by communicating with project client, 4 industry experts, and mentors about team progress
- Presented project to 50+ visitors during the Rice Engineering Design Showcase and won the Freshman Engineering Design Award
- Documented design process through 7+ technical memos and wrote instruction manual for product

EXPERIENCE

Lab Assistant, *Rice University*, Houston, TX

September 2018 - Present

Oshman Engineering Design Kitchen (OEDK)

- Received training on variety of machines in the engineering makerspace
- Enforced safety practices and assisted students with equipment usage and design projects

Intern, *Rice University*, Houston, TX

June 2018 – July 2018

Oshman Engineering Design Kitchen (OEDK)

- Created physical shoulder model for the Texas Children's Hospital to use in physical therapy treatment of infants with brachial plexus palsy in a multinational student team
- Used fabrication skills such as SolidWorks modeling, 3D printing, and laser cutting during prototyping process
- Documented design process, budget and spending, and prototype testing results
- Presented on project progress to Rice faculty and delivered final product to client

TECHNICAL SKILLS

Software: SolidWorks, Adobe Illustrator, Python, Microsoft Excel, MATLAB, some Arduino C++

Fabrication: Rapid prototyping tools (3D printer, laser cutter, plasma cutter), machining tools (saws, lathes, sanders, drills, etc.), some proficiency in CNC milling, molding/casting, and welding

ACTIVITIES

Rice Marching Owl Band - Section Leader

May 2018 - Present

- Organized strings section of band during rehearsals, performances, and planned section social events
- Regularly communicated with members through email and text messaging to inform them about band activities
- Collaborated with 15+ other band officers to plan and organize events for 50+ member band

Peer Career Advisor

April 2018 - Present

- Acted as liaison for the Rice Center for Career Development to provide career counseling services to students in residential college (resume reviews, interview preparation, networking/job search advice)