

Han Cui

Address: 735 Campus Dr, Apt 500,
Stanford, CA 94305, USA
Tel: +1 858-531-6419
Email: hancui@stanford.edu

EDUCATION

Stanford University M.S. in Materials Science and Engineering, GPA: 3.6/4.0	Stanford, CA September 2019 - Current
University of California, San Diego B.S. in Mechanical Engineering (Minor: Japanese Studies), GPA: 3.8/4.0	La Jolla, CA September 2015 - June 2019

EXPERIENCE

Stanford University Graduate Research Assistant (PI: Prof. Guosong Hong)	Stanford, CA October 2019 - Current
<ul style="list-style-type: none">– Engineered injectable organic photocapacitor implants for noninvasive neurostimulation– Utilized microfabrication techniques to develop ultraflexible microdevices consisting of near-infrared light absorbing polymers– Constructed optical pathway and measurement system for characterizing photoelectric parameters of the microdevices– Developed numerical models to calculate photoelectric parameters of the microdevices such as I-V curves	
Osaka University Summer Research Intern (PI: Prof. Hiroshi Utsunomiya)	Suita, Japan Summer 2017 & 2018
<ul style="list-style-type: none">– Established a new process to form porous metals with improved forming accuracy– Spear-headed the invention of the metal forming process that can be carried out on commercial CNC milling machine with improved accuracy of geometric accuracy of the components– Designed proof-of-concept experiments utilizing SEM and laser profiler– Published the results on the 11th International Conference on Porous Metals and Metallic Foams	

PUBLICATIONS

1. **H. Cui**, R. Matsumoto, and H. Utsunomiya, “Development of Rotational Incremental Hammering Process for Porous Metals,” in *Proceedings of the 11th International Conference on Porous Metals and Metallic Foams (MetFoam 2019)*, Apr. 2020, pp. 25-35.

PRESENTATIONS

1. **H. Cui**, R. Matsumoto, and H. Utsunomiya, “Development of Rotational Incremental Hammering Process for Porous Metals,” presented at the 11th International Conference on Porous Metals and Metallic Foams (MetFoam 2019), Dearborn, MI.
2. **H. Cui**, R. Matsumoto, and H. Utsunomiya, “Rotational Incremental Hammering Process of Porous Metals for Rapid Prototyping,” presented at 2018 Gulf Coast Undergraduate Research Symposium, Houston, TX.

TECHNICAL SKILLS

- **Microfabrication:** Photolithography, Thin film deposition
- **Materials Characterization:** SEM, XRD, UV/Vis/NIR spectroscopy
- **Computational:** Programming languages (C++, Python, and MATLAB), CAD (Solidwork and AutoCAD)

LANGUAGES

- **Mandarin:** Native
- **English:** Fluent
- **Japanese:** Professional

PROJECTS

Triton Robotics

Mechanical Design Group

February 2018 - August 2019

- Designed and built robots from the ground up for “Robomaster” robotics competition
- Managed the design of “Infantry” and “Sentry” robots as project leader
- Collaborated with other teams to integrate different aspects of the design into the overall design
- Achieved awards in Robomaster 2018 and Robomaster 2019

Capstone Design Project in Mechanical Engineering

Sponsor Liaison

March 2019 - June 2019

- Built a low-cost tabletop antenna range for the sponsor to characterize their 5G antenna modules
- Ensured all designs adhered to basic design requirements and industry standards such as IEEE Std 149-1979
- Led communications and organized meetings with the sponsor
- Prepared all projects documents and manuals for submission to the sponsor
- Earned Departmental Runner Up Award

SCHOLARSHIPS AND AWARDS

- Cum Laude 2019
- Departmental Runner Up Award for Capstone Design Project in Mechanical Engineering 2019
- The Japanese National Honor Society, College Chapter 2019
- Osaka University Scholarship for Super Short Term Study 2018
- Japan Student Services Organization Scholarship for Study in Japan 2017
- Provost Honors 9 Quarters