

### Ph.D. and Master openings in Sun Robotics Lab at Arizona State University

The Sun Robotics Lab in the School of Matter, Transport, and Energy (SEMTE) at Arizona State University is seeking highly motivated individuals for fully-funded Ph.D. and Master positions in artificial muscle and soft robotics, starting in Spring or Fall 2024. Ph.D. students will receive tuition coverage and a minimum stipend of \$31k~32k per year. The lab's mission is to develop novel robots that are adaptive to different environments, safely interact with humans, and match the adaptivity, robustness, and maneuverability of natural organisms.

#### Qualifications:

Project 1: Modeling and control of soft robots

1. BS or MS degree in the field of mechanical engineering, computer science, physics, electrical engineering, Civil engineering, or similar.
2. Experiences or interests in at least one: dynamics modeling and control, machine learning, numerical computation, solid mechanics, or computer graphics.
3. Preferred skills: MATLAB/Python/C++, FEA software (Abaqus/Ansys).

Project 2: Artificial-muscle-driven robots

1. BS or MS degree in the field of mechanical engineering, electrical engineering, mechatronics, computer science, or similar.
2. Experiences or interests in at least one: robotic mechanical design, quick prototyping, or mechatronics.
3. Preferred skills: Microcontrollers (Arduino/Raspberry PI), SolidWorks, Linux, and ROS.

#### How to apply:

To apply, interested candidates should submit an application to Arizona State University via <https://webapp4.asu.edu/dgsadmissions>, specifying their interest in working with Prof. Sun. Additionally, they should send an email titled "Prospective Ph.D. Student" or "Prospective Master Student" to [thesunroboticslab@gmail.com](mailto:thesunroboticslab@gmail.com), attaching their CV and a cover letter before submitting their application. For more information, please visit <https://sunroboticslab.github.io>. Deadlines for enrollment in Fall 2024: 12/31/2023, and in Spring 2024: 8/15/2023.

#### Useful Links:

MS in ME: <https://degrees.apps.asu.edu/masters-phd/major/ASU00/ESMEMS/mechanical-engineering-ms>

MS in Robotics: <https://degrees.apps.asu.edu/masters-phd/major/ASU00/ESRASMAEMS/robotics-and-autonomous-systems-mechanical-and-aerospace-engineering-ms>

PhD in ME: <https://degrees.apps.asu.edu/masters-phd/major/ASU00/ESMEPHD/mechanical-engineering-phd>

#### PI and ASU

Dr. Jiefeng Sun obtained his Ph.D. degree in mechanical engineering from Colorado State University. Before joining ASU, he is a postdoc with Prof. Rebecca Kramer-Bottiglio at Yale University. His work has been selected as the finalist for the best student paper award at the 2018 IROS. He is the associate editor of 2023 ICRA, and he is the Reviewer of the Year 2021 for Smart Materials and Structures Journal, a 2022 DARPA Riser, and an ASME-DSCD rising star. **Arizona State University: Ranking:** #41 Mechanical Engineering, #43 Computer Science\*, #34 Electrical Engineering. **Living:** convenient life in Phoenix metropolitan area; 15 mins to phoenix airport.

