# **2016 ASME Student Mechanism & Robot Design Competition**

ASME International Design Engineering Technical Conferences (IDETC) An event of the 40th ASME Mechanisms & Robotics Conference August 21-24, 2016, Charlotte, NC

The **ASME Student Mechanism & Robot Design Competition** is an excellent opportunity for undergraduate and graduate students to showcase their abilities in designing mechanisms and robots. **Round one:** student(s) submit a report on their design. **Round two**: several teams are invited to the conference to present their design. Winners will be recognized during the Mechanisms & Robotics Conference luncheon and presented with awards that in the past have included both cash and software prizes. Some travel funds are available for finalists.

#### **Eligibility and Scope**

- Any graduate or undergraduate registered as a full-time student through the Spring of 2016 is eligible.
- Both individual and group projects are welcome.
- An individual may participate in several entries provided each submission is on a different subject.

# For this competition, a mechanism is defined as:

Any device that transmits a force or a motion to perform a mechanical task. It may consist of rigid or deformable bodies connected with kinematic or flexural joints. It may be constructed of any type of materials, including smart and other active materials. It may be actuated by means of any transduction principle and employ any form of energy input. The size of the device can range from the nano-scale to macro-scale.

## And, a robot is defined as:

An electro-mechanical system which, by its appearance or movements, conveys a sense that it has intent or agency of its own. A robot should be able to do some or all of the following: move around, operate a mechanical linkage, sense and manipulate their environment, and exhibit intelligent behavior, such as behavior that mimics humans or other animals. The size of a robot can range from the nano-scale to macro-scale.

## Deadlines

- Letter of Intent April 1, 2016, (Friday) 11:59PM EDT
- Final Written Report May 1, 2016, (Sunday) 11:59PM EDT
- Notification to Finalists June 16, 2016 (Thursday)

Sponsors:

Organizing Committee: Brian Trease, Contest Organizer brian.trease@utoledo.edu

Joshua Bishop-Moser, Entry Coordinator joshbm@umich.edu



For a full set of rules and more information, see the official contest website: http://sites.google.com/site/asmesmrdc