

Penn Engineering's GRASP Lab, Wharton's Mack Institute Take Y-Prize Global

Media Contact: Evan Lerner | elerner@upenn.edu | 215-573-6604
Media Contact: Peter Winicov | winicov@wharton.upenn.edu | 215-746-6471

September 30, 2013



Last year, the **GRASP lab** at the University of Pennsylvania's **School of Engineering and Applied Science** and the **Wharton School's Mack Institute** helped take cutting-edge robots out of the lab and into the marketplace through the **Y-Prize Competition**.

Now, they have now joined forces with crowdsourcing platform **Marblar** and intellectual property commercialization company IP Group to take the Y-Prize worldwide

Beginning September 30, contestants from all over the globe will propose commercial applications for robotic technologies developed by Engineering professors **Vijay Kumar**, **Daniel Koditschek** and **Mark Yim** for a chance to win the ultimate prize, up to 10% of a licensing deal or spinoff created from their idea.

An October 3 kickoff event, to be held at 6:30 pm at Penn's Wu and Chen auditorium, will be streamed live via Google Hangouts. There, the engineers will provide an inside look at their robots, giving contestants a



Kumar's aerial robots

[Download this image in high-resolution >](#)

starting point for brainstorming at Marblar.com/yprize.

“We are thrilled to foster the Y-Prize competition once again,” said Saikat Chaudhuri, Mack Institute executive director and adjunct associate professor of management at Wharton. “The Y-Prize is a great example of the Mack Institute’s mission to act as a knowledge hub that unites various disciplines to yield thought leadership as well as applications in innovation management—on campus and across the world.”

Contestants will be able to devise applications centered on three types of robots:

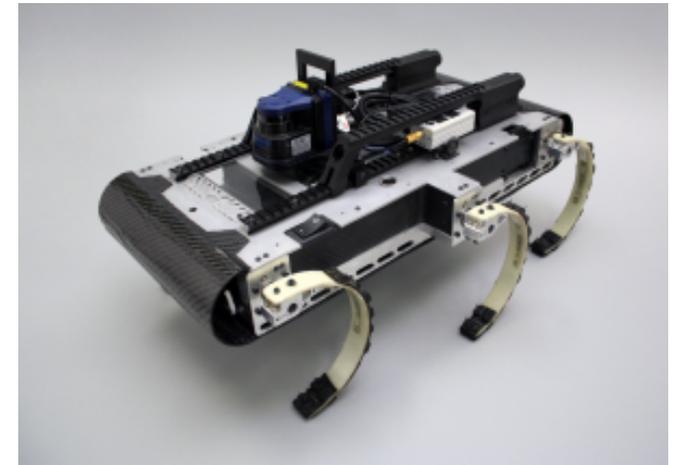
- Kumar’s [aerial robots](#) each have four rotors that afford them impressive speed and maneuverability, but their real advantage is their ability to work together, planning routes and filling in gaps of designated formations.
- Koditschek’s ground-based robot, [X-RHex](#), is a six-legged platform inspired by cockroaches’ ability to quickly cross difficult terrain. X-RHex is able to carry and use a wide variety of sensors and actuators to complement its outstanding off-road mobility.
- Each of Yim’s modular robots—called [ckBots](#)—are remarkable in their own right, but when they link up using ModLock technology, these robots become much more than the sum of their parts: they’re a construction set for building all sorts of bigger robots.

“Seeing how the technology we develop at Penn might have an impact in the real world is immensely gratifying. For example, last year’s winners, IDENTIFIED, proposed using swarms of our aerial robots to sweep for roadside bombs,” said Vijay Kumar, who is also one of the Y-Prize’s co-founders. “I’m very much looking forward to watching this year’s ideas take shape.”

The Y-Prize will take place in two stages. The Research Stage, which will be conducted globally on marblar.com, allows any participant to submit or contribute to an idea for a commercial application of the robots. Once an idea is posted on Marblar’s Y-Prize forum, other contestants can comment on, add to or help to refine it.

As the Research Stage progresses through brainstorming, technical and market research phases, participants can learn more about the robots and gain insight into their marketability through a series of interactive, Web-based discussions, hosted by Penn tech and business experts. These consultants will begin to identify the most promising ideas as they take shape and will award “marbles” to top contributors.

In December 2013, the Penn consultants, along with Penn Engineering and Wharton faculty, will judge the ideas in terms of innovation, feasibility and marketability. The best ideas will move on to the Development



Koditschek's ground robot

[Download this image in high-resolution »](#)



Yim's modular robots

[Download this image in high-resolution »](#)

RELATED STORIES

[Deep Libraries 2014 Calendar Features](#)

Stage.

In this stage, Penn students will form cross-disciplinary teams to develop the best technical concepts, leveraging the results of the Research Stage and crafting business plans for commercializing them. Four finalist teams will pitch to a panel of tech industry judges. The winners of this Grand Finale will receive \$5,000 and the opportunity to pitch their business plan to IP Group. The other finalist teams will each receive \$1,000.

“The Y-Prize is a unique chance for members of the entire Penn community to reach out and develop ideas to bring the University's cutting-edge research to market,” said Y-Prize co-founder David Hsu, Richard A. Sapp Associate Professor of Management at the Wharton School. “By working together on this contest, the Wharton School, Engineering, IP Group, and Marblar will create a powerful and truly international incubator for innovation.”

Penn Libraries 2014 Calendar Features
Parisian Fashions

An Icy Journey Gave Penn's Leah Davidson a
Worldly Perspective

Penn Women's Rugby Levels the Playing Field

ReThink Your Footprint Campaign at Penn
Succeeds in Reducing Landfill Waste

Penn Researchers Grow Liquid Crystal
'Flowers' That Can Be Used as Lenses

MULTIMEDIA



Robockey Teams Face Off in Largest Tournament Yet

For students in the “Design of Mechatronic Systems” class in the School of Engineering and Applied Science, “the finals” are more than just an exam; they are a tournament in which the winners hoist a trophy h



Greatest Possible Investment

Penn today has a more diverse, academically gifted and international student body than ever before. These exceptional men and women are choosing our University for its extraordinary opportunities for leadership, learning, and service. In this video, you'll meet three extraordinary students:



Penn Students Promote Linguistic and Cultural Diversity

Ariel Koren, a junior in the Department of East Asian Languages and Civilizations, fell in love with the Spanish language and Latin American culture when she was in high school in Jacksonville, Fla. But for her sister, who has learning disabilities, lessons about another

PENN COMPACT 2020

Building on a
Decade of Progress

ABOUT

- › STAFF
- › SUBMIT A STORY
- › CONTACT

FOR THE MEDIA

- › FACULTY EXPERTS
- › SOURCE SHEETS
- › CAMPUS PHOTOGRAPHS
- › FILMING & PHOTOGRAPHY
GUIDELINES

PUBLICATIONS

- › PENN NEWS TODAY
- › DAILY NEWS SERVICE
- › PENN CURRENT
- › PENN CURRENT EXPRESS
- › RESEARCH @ PENN
- › OTHER PENN NEWS
SOURCES

WEB & BRAND SERVICES

- › WEB SERVICES
- › LOGO/BRAND STANDARDS
- › STYLE GUIDE

SOCIAL MEDIA



OPEN
LEARNING
@
PENN