



APTOS
WATSONVILLE
SCOTTS VALLEY

Marketing and Communications Office
6500 Soquel Drive
Aptos, CA 95003
831.479.5744 (O)
831.479.5743 (F)
www.cabrillo.edu

Contact: Kristin Fabos, Director of Marketing and Communications
T: 831-479-6158
[krfabos \[at\] cabrillo.edu](mailto:krfabos@cabrillo.edu)

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FOR IMMEDIATE RELEASE – PHOTOS INCLUDED

NASA Selects Cabrillo College to Compete in Swarmathon

Cabrillo One of 23 Colleges to Participate in National Competition, April 18-22

APTOS – Cabrillo College today announced that its Robotics Club has been selected to compete in the First Annual NASA Swarmathon, a challenge to develop cooperative robotics with the goal of advancing future space exploration. Cabrillo is one of only 23 universities and community colleges selected from across the nation to compete in the Virtual Competition.

Successful space exploration requires technology to aid in the location and retrieval of resources that would potentially support life on another planet (such as ice, water, rocks, minerals and construction materials). Small, rover robots, or ‘Swarmies’ can be programmed to explore extra planetary surfaces for these resources. The goal of the NASA Swarmathon competition is to develop and optimize the Swarmies so that they work in cooperation improving their resource retrieval rates 2-4 fold, much more quickly and efficiently than robots working alone.

Cabrillo College is competing in the Virtual Competition, in which students will be challenged to develop search algorithms to program three virtual Swarmie bots. The Swarmies operate in a virtual environment and have a sonar device on the front, as well as a front-facing camera. For the competition, they are programmed to seek out and find bar codes, then return them to a central location. Each of the preliminary rounds is a half-hour in a smaller virtual arena and the final round lasts an hour and takes place in a larger virtual arena.

Both the Physical and the Virtual competitions of the First Annual Swarmathon will take place the weekend of April 18-22, 2016, with the Physical Competition being held at the NASA Kennedy Space Center.

“Millions of lines of C and C++ programming code are required to make these Swarmies go,” said Cabrillo College Computer and Information Systems Instructor and Robotics Club Advisor Michael Matera. “This competition helps our students work in teams and sort ideas into things that can be accomplished, translating their coding skills into tasks that the Swarmies actually perform.”

Participation in the NASA Swarmathon will accomplish two objectives: it will improve students’ skills in robotics, computer science and coding, while also advancing technology for actual use on future NASA space exploration missions.



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“Cabrillo’s participation in the NASA Swarmathon has increased interest in the Robotics Club and has brought us some new recruits,” continued Matera. “As for our potential to win the competition, I think we’ve got a really good shot.”

In order to be selected to compete in the NASA Swarmathon, colleges had to be minority-serving institutions, and had to go through a competitive application process, outlined on the NASA Swarmathon website at www.nasaswarmathon.com

In addition to competing in the NASA Swarmathon, Cabrillo’s Robotics Club is building and testing a drone. To follow their progress in the NASA Swarmathon competition or to get additional information about the Cabrillo Robotics Club, visit their website at <https://www.sites.google.com/site/cabrillorobotics/home>.

About Cabrillo College

Cabrillo College is a leading California community college serving Santa Cruz County with locations in Aptos and Watsonville. It is ranked #1 in transfers to UC Santa Cruz. Founded in 1959, the college offers over 100 academic and career technical education programs that serve multiple educational goals such as A.A. and A.S. degrees, certificates of achievement, skills certificates, transfer to 4-year institutions or for lifelong learning and personal enrichment. Cabrillo College is a dynamic, diverse and responsive educational community that is dedicated to helping all students achieve their academic, career, and personal development goals.

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