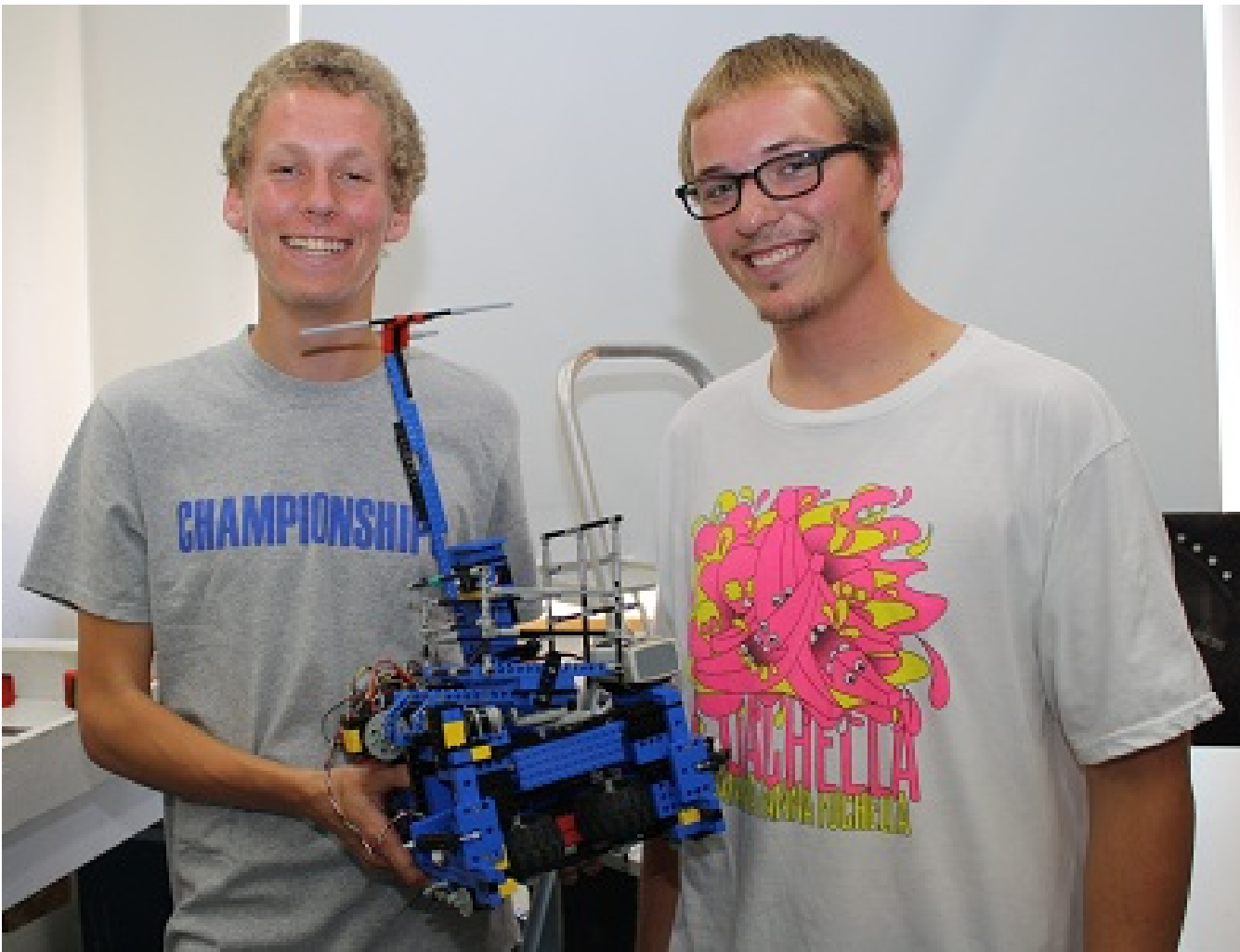


## UCSB Engineering Undergrads Build and Battle LEGO® Robot ? Rats? for Robotics Course Finale

In Professor Casey Hare's Intro to Robotics: Robotic Control summer course, undergraduate students from mechanical, electrical, and computer engineering join forces for the ultimate LEGO® mechatronics battle known as the annual Lego Robot Rats Competition.



The pressure is intense during this condensed 6-week course in robot control technology wherein students must design a completely autonomous LEGO® robot. Each Robot Rat must have the capability to perform complex tasks like sense walls and other optical cues to navigate the battle table and collect Styrofoam cheese blocks for points. With fun and glory as the motivator, students learn integration of software engineering, mechanics, electronics and systems design.

Teams are given a stack of materials a microcontroller, batteries, interface, and a bucket of optical and other sensors, said Professor Hare. The object is to build a structure and drive train around it using LEGOs.

Solid programming and systems design are key to making a LEGO Robot Rat work, but strategy and teamwork help win the competition.

?We tried to develop a strategy that was more reliable than really high scoring,? chimed in this year?s winning team o  
f Keith Allen and Mike Wysocki (pictured). ?We had a strategy that worked very simply so that it worked al  
most every time.?

For interested students: The LEGO© Robot Rat class [Introduction to Robotics: Robot Control](#) , is an upper  
division elective taught twice a year in the summer and winter. Classes fill up for this popular course, but it is  
open to students from any major who meet the prerequisites.

» [See more LEGO Robot Rat Competition photos on Facebook](#)

» [Check out team videos from last year's competition](#)

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## Images

