Funding Request for RPI Robotics Team

Organization Name: RPI Rock Raiders
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Activity: WPI Sample Return Robot Challenge
Description: The WPI Sample Return Robot Challenge is a NASA Centennial Challenge. The competition is to design, build, program, and run a robot to autonomously find and retrieve samples in an outdoor environment, simulating retrieving samples from Mars or the Moon. The competition will be held the week of June 8 - June 13, 2015 at the Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts. A $1.49 million prize will be distributed among the winning teams.

Our team, RPI Rock Raiders, is an interdisciplinary robotics team representing RPI. We are comprised of graduate and undergraduate RPI students from the MANE, ECSE, CogSci, Material Science, and CS departments. Currently we have 42 students interested in joining our team, with 25 of them fully committed to the team. We plan to send a delegation of 10 students to WPI for the final robotics competition.

Budget:

$3000 entry fee
$5000 robot development costs
$4000 travel costs for competition

$12,000 total

Current Funding:

$500 - Technology Achievement Reward (last year's competition)
~$1500 - ($50 per student) member dues

In addition to our request to the School of Engineering, we are requesting funds from the Departments of Mechanical Engineering ($1000), Electrical and Computer Systems Engineering ($1000), Cognitive Science ($500), and Computer Science ($1000), as well as the Schools of Science ($2500) and Humanities ($1000) and CATS ($1000). We are requesting $2500 from the School of Engineering.

The competition will give practical experience for the students in engineering design and implementation, working with an interdisciplinary team, and developing state-of-the-art robotics. The competition is also broadcasted to NASA TV, giving RPI and its departments national

coverage. Furthermore, we will grant RPI and the School of Engineering access to any media material we obtain or create relating to our participation in the competition.