University of Missouri-Columbia
Robotics and Assistive Technology: A Win-Win Scenario
EDUCAUSE Southeast Regional Conference 2010

The University of Missouri-Columbia's Adaptive Computing Technology (ACT) Center and the College of Engineering's Department of Electrical and Computer Engineering have formed ***a collaboration giving engineering faculty and students a fresh insight into person-centered technology research and development***. Current projects are addressing a unique population of persons with severe mobility impairments, and have included electromyographic control mechanisms for power wheelchairs and mobile phone devices. Current research is focusing on a semi-autonomous "smart wheelchair" that includes path planning and obstacle avoidance. ***Course projects focusing on the needs of persons with disabilities results in motivated students and project outcomes that directly touch people's lives.***

Factors that supported the success of this collaboration included:
1) regular semi-weekly meeting schedule to maintain momentum;
2) kept the core group to a small number of active members;
3) included undergraduate and graduate students in all meetings;
4) kept research scope nerrow;
5) faculty placed strong focus on seeking grant funding for potential projects;
6) students placed strong focus on white papers and small projects as funding permitted.

Nearly every institution of higher education has the collaborative opportunity to replicate this win-win scenario where students are interested, engaged and solving real life problems. You can begin by finding the answers to the following questions:
- Who coordinates disability services on your campus?
- Who is responsible for IT related accommodations?
- What computer science and/or engineering faculty might be particularly suited to explore assistive technology related projects?
- Are there faculty, staff or students with disabilities on your campus that would be interested in participating?

Join the EDUCAUSE IT Accessibility Constituent Group!

The IT Accessibility Constituent Group helps the EDUCAUSE community to assess the scope of issues of IT accessibility, identify resources and initiatives, develop best practices on policy and assistive program and service development, and in general focus on how to approach campus-wide universal access to information available via technology by engaging in dialogue across boundaries within and beyond the campus environment. (http://www.educause.edu/groups/itaccess)

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