

For Immediate Release

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**WizKidz Science and Technology Centers in conjunction with Georgia Tech receives \$490,000 from National Science Foundation for S.T.E.M research for disabled Students**

*WizKidz Science and Technology Centers and Georgia Institute of Technology has received \$490,000 from the National Science Foundation to implement computing learning institutes for students with disabilities.*

**Atlanta, Ga. February 25, 2010** WizKidz Science and Technology Centers, Inc. announced today that WizKidz Science and Technology Centers in conjunction with the Georgia Institute of Technology has received \$490,000 from the National Science Foundation -*Broadening Participation in Computing (BPC)* initiative to develop *Accessible Robotic Programming for Students with Disabilities (ARoPability)*, a three year research project that will identify means for increasing the computing pipeline that taps into nontraditional populations and investigate the use of alternative interface modalities in engaging middle and high school students with disabilities in robotics-based programming activities. The three year project will leverage support from the Center for the Visually Impaired, the National Federation of the Blind of Georgia, and Childrens healthcare of Atlanta. The project will also leverage a combination of undergraduate and graduate students to develop and deliver the interface modules accessible to students with disabilities, thus providing a circular-mentoring environment.

***Increase the number of students with disabilities interested in computing disciplines***

The major outcomes of this project are focused on alternative programming tools that transform computing technologies into accessible modules for students with visual or physical impairments. The project will establish Robotic Institutes at the Center for the Visually Impaired and with the National Federation of the Blind to assess ability to engage students with visual impairments and establish Robotic Institutes in conjunction with Children's Healthcare of Atlanta to assess ability to engage students with physical impairments. Teacher training kits and documentation will be created to provide teachers with modules that can be used for incorporating students with disabilities in the classroom environment nationwide.

***Robotic Institutes and Multi-Modal Interfaces to Engage Students with Disabilities***

The PI/Co-PI Dr. Ayanna Howard of Georgia Tech and Rayshun Dorsey of WizKidz Science and Technology Centers have extensive experience in encouraging nontraditional students to pursue computing careers through robotic activities. Rayshun Dorsey founded and currently coordinates Project S.T.E.A.D.Y (Science Technology and Engineering Academy for Disabled Youth) a series of summer workshops that expose visually impaired students to educational robotics. Dr. Ayanna Howard currently serves as Associate Professor for the School of Electrical and Computer Engineering at Georgia Tech and is the founder of the Human-Automation Systems (HumAnS) Lab at Georgia Tech whose research is centered on the concept of humanized intelligence, the process of embedding human cognitive capability into the control path of autonomous systems.

## **WizKidz Science and Technology Centers**

WizKidz Science and Technology Centers, Inc. is a Georgia 501(c)(3) Non-Profit organization that offers S.T.E.M driven academic enrichment programs for K-12 students. WizKidz offers a pre-college learning structure that outline concepts that are important in the understanding of science, technology, engineering and math. WizKidz learning centers address the unique needs of youth to help them achieve success while providing a constructive outlet during out of school hours. WizKidz mission is to ensure that K-12 students are globally competitive in science and technology by developing programs intended to address low testing scores in Math and Science and devise comprehensive plans to help students improve in these particular testing areas. *More information on WizKidz Science and Technology Centers initiatives can be found at [www.wizkidztech.org](http://www.wizkidztech.org)*

## **Human-Automation Systems (HumAnS) Lab at Georgia Tech**

The focus of the Human-Automation Systems (HumAnS) Lab is centered around the concept of humanized intelligence, the process of embedding human cognitive capability into the control path of autonomous systems. Specifically, they study how human-inspired techniques, such as soft computing methodologies, sensing, and knowledge representation, can be used to enhance the autonomous capabilities of intelligent systems. The lab's efforts address issues of autonomous control as well as aspects of interaction with humans and the surrounding environment. In their research efforts, the HumAnS Lab draws on the disciplines of robotics, cognitive sensing, machine learning, computational intelligence, and human-robot interaction.

## **Center for the Visually Impaired**

The Center for the Visually Impaired is Georgia's largest comprehensive, fully accredited, private facility providing rehabilitation services for individuals of all ages who are blind or visually impaired. Since 1962, the Center has grown to serve as a model of innovative services for people who have a wide range of vision impairments from low vision to total blindness. The Center for the Visually Impaired is fully committed to support the ARoPability project by including the research in their STARS program from 2009-2012.

## **National Federation of the Blind of Georgia**

With more than 50,000 members, the National Federation of the Blind is the largest and most influential membership organization of blind people in the United States. The NFB improves blind people's lives through advocacy, education, research, technology, and programs encouraging independence and self-confidence. It is the leading force in the blindness field today and the voice of the nations blind. In January 2004 the NFB opened the National Federation of the Blind Jernigan Institute, the first research and training center in the United States for the blind led by the blind. The National Federation of the Blind of Georgia has committed their time, staff and support to the ARoPability project by providing us with the resources needed to successfully implement the project.

The first ARoPability camp is scheduled to take place July 2010. For camp inquiries, please contact Rayshun J. Dorsey –President of WizKidz Science and Technology Centers at 678-377-1078 or email at [rdorsey@wizkidztech.org](mailto:rdorsey@wizkidztech.org)