Brian Thomas
Robots for Education (Chad Jenkins)
Brown University
Spring 2011
Images courtesy of www.artsialliance.org
What is ARTSI?

- "Advancing Robotics Technology for Societal Impact"
- Collaborative education and research project
- Founded in 2007
Goals

- Increase African American participation in robotics and CS research
- Increase prevalence of robotics in HBCUs (Historically Black Colleges and Universities)
- Encourage K-12 and HBCU students to pursue CS and robotics education
- Promote role modeling and mentoring
- Create a nationwide learning community
- Make robotics careers attractive
Accomplishing ARTSI's Goals

- Student research conferences
- Summer faculty workshops
- Summer REU (Research Experience for Undergraduates)
Student research conferences

- Robotics competitions
- Computer science olympiads
  - Cryptography
  - Hardware/software integration
  - Robotics
  - Web design
Summer faculty workshops

- Seems like a mix between
  - Helping foster robotics education
  - Professors talking about their research
- Sample education-related topics from last year
  - Robotics Courses at HBCUs panel
  - Attracting Students to Computer Science Using Artificial Intelligence, Economics, and Linear Programming
  - Developing Robotics Curriculum Modules
  - Robot Platforms & Middleware Session
Summer REU

- Paid internship
- 8-10 weeks
- Students work with a professor on a project
  - Writing ROS drivers for the iCreate (with Chad Jenkins)
  - Create a dustpan robot for healthcare (with Charlie Kemp)
  - Collecting data from CRITICAL MASS bicycling event (with Carl DiSalvo)
Brown University (Chad Jenkins)
Carnegie Mellon (Illah Nourbakhsh)
Carnegie Mellon (Sara Kiesler)
Carnegie Mellon (Dave Touretzky)
Duke University (Jeff Forbes)
Georgia Tech (Ayanna Howard)
Georgia Tech (Carl DiSalvo)
Georgia Tech (Charlie Kemp)
Rice University (James McLurkin)
University of Alabama (Monica Anderson)
University of Michigan (Edwin Olson)
University of Pennsylvania (C.J. Taylor)
University of Pittsburgh (Quality of Life Technology Center)