Welcome to ARTSI

The ARTSI (Advancing Robotics Technology for Societal Impact) Alliance is a collaborative education and research project centered around robotics for healthcare, the arts, and entrepreneurship. Spelman College, a historically black college (HBCU) for women is leading the alliance in partnership with several other HBCUs and Research I (R1) institutions. These institutions include Florida A&M University, the University of the District of Columbia, Hampton University, Morgan State University, Norfolk State University, Winston-Salem State University, the University of Arkansas-Pine Bluff, Tennessee State University, Elizabeth City State University, North Carolina A&T, Jackson State University, and Howard University. R1 membes include Carnegie Mellon University, Georgia Institute of Technology, Brown University, Duke University, the University of Alabama, the University of Washington, and the University of Pittsburgh.
ARTSI Goals:
- Increase the number of African Americans who study computer science and robotics in college, and encourage them to pursue advanced training in graduate school.
- Increase the number of HBCU faculty who educate students in robotics and involve students in robotics research.
- Recruit K-12 and HBCU students to pursue computer science and robotics education.BROADER IMPACTS of the ARTSI Alliance

- Promoting role modeling and mentoring for HBCU faculty and students in robotics education and research.
- Creating a nation-wide resource and learning community of African Americans involved in robotics, and increasing public awareness of their work.
- Enlarging the audience of students who find robotics computing careers attractive.

Eight of these partners are HBCUs and seven are Carnegie Research I institutions. ARTSI will engage African Americans in computing with interdisciplinary, collaborative robotics education and research projects that focus on improving society in areas such as healthcare, the arts, and entrepreneurship. ARTSI activities will span the academic pipeline from K-12 through the faculty ranks. At the K-12 level, students will be recruited with community outreach using robotics and art, robotics road shows, and a robotics educational film online repository. At the undergraduate level, HBCU students will be exposed to new robotics curriculum, and they will be encouraged to pursue advanced training in graduate school through summer research experiences, collaborative, interdisciplinary robotics projects in the arts and health, instruction in technical film documentation, student virtual film festivals, annual robotics conferences, and instruction in entrepreneurship for computer science. At the faculty level, it will increase the number of HBCU faculty who educate students in robotics and involve students in robotics research by providing faculty mentoring, summer research experiences for underrepresented faculty at R1 robotics labs, robotics summer workshops, and development and dissemination of robotics educational material through a web-based portal. The Alliance will have industry partners, including Seagate, iRobot, Microsoft Research, and Juxtopia, as well as educational partners, including Florida-Georgia Louis Stokes Alliance for Minority Participation and Computer Science Teachers Association. The ARTSI alliance provides a symbiotic relationship that joins the strengths of HBCUs in conducting outreach and education in a nurturing learning environment and the R1's strengths and resources for conducting world class research. The ARTSI Alliance will motivate students to pursue computer science careers by promoting the creativity and socially beneficial aspects involved in researching and designing new computing and robotics technology by using robotics projects, curriculum, and media.