



## 2015 IEEE RoboResearch Seminar a Success!

Friday, March 6, 2015, approximately 95 researchers, industry professionals, and students from across North Carolina gathered at the University of North Carolina-Charlotte's EPIC building for the 2015 IEEE RoboResearch Seminar. This event is targeted at bringing together state government, industry, and Universities to share information on many aspects of robotics research and development in North Carolina. According to Conference Chair Grayson Randall, "It was great to see the leaders of government, industry and academia get together to discuss advances in robotics. By convening these experts, we hope to accelerate the robotics industry in North Carolina."

At this inaugural event, attendees celebrated the past, present, and future of robotics and automation engineering in North Carolina. For example, Dr. Trevor Hackman shared an overview of the history of robotic surgery, Dr. Jeremy Renshaw explained the current role of robotics in inspecting used nuclear fuel containers, and Dr. Seth Hollar and Mr. Marshall Brain proposed an automated personal rapid transit system. Other technical topics included Dr. James Conrad's presentation on work done through UNC-Charlotte's Autonomous Vehicle Lab; Mr. Bill Meldrum's presentation on robots to control radiation exposure in nuclear power plants; Mr. Kyle Snyder's presentation on the NextGen Air Transportation Center; Dr. Jing Xiao's presentation about her research on autonomous robots and adaptive motion; and Mr. Jason Traud and Mr. David Margolis's presentation on their robots for consumer, industry, and military applications.



*Dr. Jing Xiao shares her research at the 2015 IEEE North Carolina RoboResearch Seminar. Photo courtesy Mike Hermann*

In addition to sharing technological information, the 2015 IEEE RoboResearch conference also highlighted the unique role that robotics and engineering plays in North Carolina's economy. Dr. John Hardin from the North Carolina Department of Commerce noted the important role that innovation plays in economic development, as the innovation economy, including high-tech manufacturing, has a five-fold multiplier effect on job creation. Dr. Chris Brown echoed Dr. Hardin's statements as he highlighted the connections between robotics research and the research priorities for the University of North Carolina system. Mr. Paul Wetenhall shared practical advice for researchers and students wishing to move towards commercialization of products, and Mr. James R. Vann provided information on the legal implications of unmanned aircraft. Presentations are archived on the seminar website, <http://sites.ieee.org/ncc-roboresearch/>.



*KEN, making new friends during the conference. Photo courtesy Mike Hermann*

Finally, the 2015 North Carolina RoboResearch Seminar showcased the role that the IEEE can play in supporting the development of new technologies. Mr. Daniel McDonald introduced the crowd to KEN, an early prototype of a humanoid robot being developed as a project of the IEEE Eastern North Carolina Section and the Robotics and Automation chapter. Through the KEN project, IEEE members have been able to increase skills, network, and push the boundaries of technology while taking advantage of their IEEE membership.

The 2015 IEEE RoboResearch Seminar was made possible due to the generous support of UNC Charlotte, Research & Economic Development, Charlotte Research Institute. Additional support was provided by exhibitors, including Touchstone 3D Services, Opobotics, SuperDroid Robotics, Vann Attorneys, PLLC, NCSU, NC Space Grant, NC FIRST Robotics, and the IEEE Charlotte Section.

Planning for the 2016 event has already begun. If you are interested in being involved with this unique opportunity to advance robotics research and development in North Carolina, contact Conference Chair and Eastern North Carolina Section Chair, Grayson Randall at [g.randall@ieee.org](mailto:g.randall@ieee.org).