

IBM Research and Rensselaer Polytechnic Institute Pioneer Next-Generation Cognitive Environments for Business Decision Making

Launch of New Cognitive and Immersive Systems Lab at RPI Will Help Advance More Natural Collaborative Interactions Among Humans and Machines

YORKTOWN HEIGHTS, N.Y. and TROY, N.Y. - 18 nov 2015: IBM [Research](#) (NYSE: [IBM](#)) today announced plans for a multi-year collaboration with Rensselaer Polytechnic Institute to pioneer new frontiers in the scientific field of immersive [cognitive systems](#). The research collaboration will be housed in the newly established Cognitive and Immersive Systems Lab (CISL) on the Rensselaer campus in the Curtis R. Priem Experimental Media and Performing Arts Center (EMPAC).

CISL's mission is to explore and advance natural, collaborative problem-solving among groups of humans and machines. The lab is built around a futuristic "Situations Room" that can be adapted to industry-specific environments (including Cognitive Boardrooms, Design Studios, Diagnosis Rooms and Immersive Classrooms) and is designed to surface new ways to improve how people work together.

"With the new lab, we are taking an important step towards a future in which smart machines and smart humans potentiate each other, and the end result is better decisions and outcomes," stated Dr. Shirley Ann Jackson, president, Rensselaer Polytechnic Institute. "We are bringing together two separate strains of emergent technologies to enhance the power of the other: cognitive computing technologies coupled with intensive visual and auditory immersive environments we are developing at Rensselaer."

"Cognitive computing is poised to transform every profession, industry, and economy, and immersive cognitive systems will play a vital role in shaping the symbiotic work environments of the future in which critical business decisions will be made," said Dr. John E. Kelly III, Senior Vice President, Solutions Portfolio and Research at IBM. "We are excited to collaborate with Rensselaer on the development of this new frontier as we continue to progress the science that will transform the way professionals around the world work."

Cognitive computing systems are designed to collaborate with human experts in more natural ways, learn through this interaction, and enable individuals and teams to make better decisions by making sense of massive unstructured data. The CISL platform is an immersive, interactive, reconfigurable physical environment that enhances group cognition. It pro-actively responds to its occupants by "listening" to and "watching" them, engages multiple users working in small groups at the same time on different aspects of a larger activity, and explores interactions and visualizations that would be impossible with a few people looking at limited screens.

CISL will pursue an exciting agenda for researchers interested in many areas including User Experience Technologies and Collaborative Cognition. It will be led by Hui Su of IBM Research, a leading researcher in the area of cognitive user experience.

About IBM Research

Now in its 70th year, IBM Research continues to define the future of information technology with more than 3,000 researchers in 12 labs located across six continents. Scientists from IBM Research have produced six

Nobel Laureates, 10 U.S. National Medals of Technology, five U.S. National Medals of Science, six Turing Awards, 19 inductees in the National Academy of Sciences and 14 inductees into the U.S. National Inventors Hall of Fame – the most of any company. For more information, please visit www.research.ibm.com.

About Rensselaer Polytechnic Institute

Founded in 1824 as the first technological research university in the United States, Rensselaer embodies “The New Polytechnic:” a new paradigm for teaching, learning, and research—a view of the technological research university as a fresh collaborative endeavor across disciplines, sectors, and global regions. Rensselaer is a driving force behind breakthroughs in engineering and science in virtually every arena—from transportation and infrastructure to business, medicine, manufacturing, big data, computation, outer space, and cyberspace. For more information, please visit www.rpi.edu.

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