



## “From Robots to Smart Meeting Rooms: Building Systems to Help Us Make Sense of the World”

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**Abstract:** I will describe my work in robotics, in virtual and augmented reality, and in building smart conference rooms. In each case, the objective has been to build sensory systems that build up an understanding of their environment and effectively augment the sensory experiences of the associated humans or human users. Much of this work took place at IBM's Cognitive Environments Lab, a highly instrumented “smart” meeting room, in Yorktown Heights, NY, where I am one of the principal investigators. I will describe our research agenda, which is ripe with academic collaboration opportunities, and describe some of our latest projects, including (i) work on a virtual reality system for remotely experiencing and controlling the smart conference room, (ii) work on a humanoid robot, and (iii) our work with the Toronto Raptors professional basketball team to build them a “war room” for analyzing trade scenarios and potential draft picks.



**Biosketch:** Jon Lenchner is a Senior Technical Staff Member and past Master Inventor at the IBM T.J. Watson Research Center in Yorktown Heights, NY. He has been at IBM since 1994 and at the T.J. Watson Research Center since April 2000. He led the development of IBM's first e-commerce web sites in the 1990s, worked on the game strategy component of the Watson Jeopardy-playing system, and built a robot that is widely used around IBM for data center energy efficiency monitoring and asset tracking. Before IBM Jon worked for the company Nittany Geoscience focusing on contaminant transport in groundwater systems. Jon got his B.A. in mathematics from Dartmouth College in 1981, spent a year at Cambridge University as a Winston Churchill Scholar in 1982, and many years later, in 2008, received his Ph.D. in mathematics at Polytechnic University (now NYU Polytechnic School of Engineering).

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**Time: 11am-12pm**

**Location: 227 Mudd**