

Robots, Artificial Intelligence take the stage at Brown + video

By G. Wayne Miller
Journal Staff Writer

Humanity Centered Robotics Initiative draws experts from around country

PROVIDENCE, R.I. – As the advance of robotics and artificial intelligence continues without pause, public fears persist about the effects of ever-smarter machines on humans. Milind Tambe, a professor of engineering and computer science at the University of Southern California, acknowledged that on Thursday during a conference at Brown University.

“But there is tremendous positive we can do right now,” Tambe said, as he launched into a presentation of some of the possibilities he and his colleagues have brought to the real world today.

The novel use of artificial intelligence, or AI, to increased awareness of HIV in Los Angeles’ large homeless population, for example – an effort that has led to a significantly increased percentage of people being tested and treated for the disease. The public-health implications are evident.

Other contemporary uses Tambe cited are his group’s use of AI in the study of California gang violence, substance abuse, mental-health treatment of veterans, and wildlife protection – predicting where poachers will strike next – in Uganda. The wildlife effort correctly predicted activity that led to identification of a poachers’ camp and a government ambush that captured them.

“AI can achieve these things,” Tambe said.

He and more than 20 other experts spoke at the day-long “Societal Implications of Robotics Symposium 2,” sponsored by Brown’s Humanity Centered Robotics Initiative. Topics included “The Rise of Robots Makes People More Neighborly,”

“Trust in Self-Driving Cars,” “Getting Ethics Right,” and “Getting Social Benefits Right.”

Also, “Delivering Policy for Healthcare Robots in the Home,” delivered by Selma Sabanovic, assistant professor at Indiana University’s School of Informatics and Computing.

Sabanovic discussed such present-day home robots as GiraffPlus, a monitoring and alert system; InTouch Health, a company that offers related “telehealth” services and physician networking; and the Joy for All Cat, a realistic animatronic pet designed for the elderly and manufactured by Hasbro for its Companion Pets line.

Among the tasks ahead for such machines, Sabanovic said, are longer-term and in-home studies; “developing robot design research that addresses the needs of institutions, not just individuals, and fits into their workflow”; and “participatory design and evaluation of robots to create social fit and benefits.”

About those fears?

Julie Shah, a technology pioneer with MIT’s Department of Aeronautics and Astronautics, said she does not frequently hear those concerns at the front-line level – in healthcare, among other fields, where she works.

“There really is no discussion that this is [all] going to be turned over to machines in the foreseeable future,” she said. “there is no fear.”

Rather, she said, “it is sort of presumed that people need to be in the loop going forward.”

But will there come a day when machines will do “everything” an audience member asked?

“Possibly,” Shah said. “I really don’t know. I still don’t think it’s a practical concern.”

And should that day come, she and others agreed, humans will be able to share their world with machines, just as they have since the dawn of the Industrial Revolution more than two centuries ago.