

# Dr. Tracy Hammond demonstrates smart vest in Gävle

MAY 21, 2014

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During a recent visit to Gävle, Sweden, Texas A&M Associate Professor Dr. Tracy Anne Hammond met with representatives of industry and academia to cultivate interest in her team's smart vest research project as well as other ongoing investigations.

Gävle is establishing itself as Europe's geographic information system capital. As a guest lecturer at Future Position X (FPX), a non-profit cluster organization in Gävle, Hammond demonstrated the smart vest to FPX members who were inspired by her innovation. FPX is spearheading the development of a strong geographic information industry in Gävle.

The smart vest, a lightweight haptic navigation vest, was a collaborative, interdisciplinary effort involving recent Texas A&M graduate Dr. Manoj Prasad and Dr. Daniel W. Goldberg, assistant professor of geography.

The vest has been used by the U.S. military paratroopers to communicate in silent and dark missions. Additionally, pre-programming Google road maps into the vest allows navigation through vibrating haptic sensors embedded in the material. The smart vest also lends itself to aiding motorcyclists. "It is perfect for a motorcyclist who needs to have both eyes and ears

focused on the traffic and hands on the handlebars," says Hammond.

In an article about Dr. Hammond's research, "Forget maps and GPS..." Maria Carlsson of the *Gävle Daily* newspaper quoted FPX R&D Process Manager Roland Norgren as saying, "We have a dialogue with Tracy Hammond's research team to see what projects we can pursue together." The news item concluded that collaboration with Hammond will bring new business and jobs to Gävle.

Hammond, who joined Texas A&M University in 2006, is the director of the Sketch Recognition Lab in the Department of Computer Science and Engineering. She holds a Ph.D. in computer science and finance technology option from MIT and four degrees from Columbia University: a master's degree in anthropology, a master's degree in computer science, a bachelor's degree in mathematics, and a bachelor's degree in applied mathematics. Hammond's research focuses on human perception, sketch recognition, computer human interaction, and learning. She received the 2012 IAAI Innovative Applications of AI Deployed Application Award and was named the 2011-2012 Charles H. Barclay Jr. '45 College of Engineering Faculty Fellow.

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