Abstract

Computer technology has mostly focused either on the isolated individual, or has treated the person as a clueless extra wandering in a computer-controlled environment. Researchers seem to have forgotten that people are social animals, and that the quality of their lives is defined by their roles in human organizations. Instead of inventing technology for the individual as an isolated entity, why not invent systems that support people's organizational roles? Or even invent new types of organizations?

My colleagues and I are inventing technology that can potentially produce organizations that are more creative and efficient, and that better support the individual. Using wearable computers that actively analyze face-to-face interactions within the workplace we can extract conversational features, identify participants, define context, and determine content. By aggregating this information, high-potential collaborations and expertise within the organization can be identified, information movement and decision-making can be augmented, and social networks reinforced. Examples using this technology to initiate productive connections are shown, and privacy concerns are addressed.

Biography

Prof. Alex (Sandy) Pentland is a pioneer in wearable computers, health systems, smart environments, and technology for developing countries. He is one of the most-cited computer scientists in the world. He is the founding director of Media Lab Asia, and is a co-founder of the Center for Future Health, the Wearable Computing research community, and the international Digital Nations Consortium. He was formerly the Academic Head of the MIT Media Laboratory, and is the Toshiba Professor of Media Arts and Sciences. He has won numerous international awards in the Arts, Sciences and Engineering. He was chosen by Newsweek as one of the 100 Americans most likely to shape the next century. He currently directs the Human Design research group at the MIT Media Lab.