

## Invited Talk

# **Augmenting Conversation with Imagery: The Road Ahead**

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Abstract: Imagine that the human body could produce imagery as effortlessly as it produces language, so that to generate a map on a street corner is as naturally done as it is to give verbal directions. Imagine a computer using all kinds of imagery while engaging in a conversation with a human being. The goal of this talk is to explore why and how technology can be used to augment conversation between people and between people and machines. In the first part of this talk, we explore and discuss devices and systems that could begin to give human beings this new vehicle for expression, such as personal projectors and ecologies of symbiotic displays. The second part looks into the interface paradigms that might allow a person to collect, produce, alter, and control the appearance and flow of imagery, using speech processing, personal displays, and direct brain interfaces. In the third part of the talk we will look into issues on having machines using imagery in their communication with human beings. Finally we discuss the desirability of a personal imagery medium and explore possible short and long-term applications.

Bio: Claudio Pinhanez is a computer scientist and media artist. Since 1999 he has been a research scientist at IBM T.J. Watson, where he designs and develops interactive spaces and investigates physical interfaces to information. For the last four years he has been leading the Everywhere Displays project, developing novel ways for interaction in ubiquitous computing environments based on steerable interactive projectors. Claudio got his PhD. from the MIT Media Laboratory in 1999 working on the design and construction of physically interactive environments and in computer theater. Claudio has also been a visiting researcher at ATR-MIC laboratory (Kyoto, Japan) and Sony Computer Science Laboratory (Tokyo). In 2003 he was nominated the Most Promising Scientist with a Graduate Degree award by the Hispanic Engineers National Achievement Awards Conference (HENAAC). Claudio has received the IBM Research Pat Goldberg Best Paper Award in Computer Science and best paper awards at PerCom'03 and ICVS'03.

More information and publications at <http://www.research.ibm.com/people/p/pinhanez/>