Iccv 2007 - Workshop on Computer Vision Applications for Developing Countries

Dr. Claudia Bauzer Medeiros University of Campinas

Claudia Bauzer Medeiros, Ph.D., is a full professor of computer science at the Universidade Estadual de Campinas in Sao Paulo, Brazil. Claudia Bauzer MedeirosWith a focus on design and development of scientific databases, her work includes lead roles in over 30 multinational R&D projects, particularly those involving agro-environmental planning, biodiversity and educational systems. Dr. Medeiros has served in leadership positions for several Brazilian government initiatives on computer science research and education. As president of the Brazilian Computer Society she has established key goals and programs aimed at attracting and fostering women in IT professions.



Talk Title: The Grand Challenges in Computer Science in Brazil 2006-2016

Dr. Kentaro Toyama Microsoft Research India

Kentaro Toyama is assistant managing director of Microsoft Research India, in Bangalore, where he supports the daily operation and overall management of the research lab. He also leads a group that conducts research to identify applications of computing technology in emerging markets and for international development. From 1997 to 2004, he was at Microsoft Research in Redmond, where he did research in multimedia and computer vision. His paper, "Probabilistic tracking in a metric space," co-authored with Andrew Blake was awarded the Marr Prize at ICCV 2001. He thought he left vision when he moved to India in 2004, but amazingly, it has returned in some unexpected ways. Kentaro graduated from Harvard with a bachelors degree in physics and from Yale with a PhD in computer science.



Talk Title: Computer Vision for Socio-Economic Development

India is home both to a booming IT economy and to a large, economically poor population. While the latter benefit little from the former, there are some things that technology can do to support the needs and desires of underserved communities. The Technology for Emerging Markets group (http://research.microsoft.com/research/tem) at Microsoft Research India conducts research specifically to identify possibly applications of technology for socio-economic development. Our approach is interdisciplinary and human-centered with group members consisting of designers, social scientists, and technologists. In this talk, I will present an overview of some of our projects and talk about the role that computer vision could play

Dr. Ramesh Jain, University of California, Irvine

Ramesh Jain is an educator, researcher, and entrepreneur. Ramesh is a pioneer in multimedia information systems, image databases, machine vision, and intelligent systems. Currently he is the Donald Bren Professor in Information & Computer Sciences at University of California, Irvine. Before this he was a Farmer Distinguished Chair at Georgia Institute of Technology. While professor of computer science and engineering at the University of Michigan, Ann Arbor and the University of California, San Diego, he founded and directed artificial intelligence and visual information systems labs. Ramesh was also the founding Editor-in-Chief of IEEE Multimedia magazine and serves on the editorial boards of several journals in multimedia, information retrieval and image and vision processing. He has co-



authored more than 300 research papers in well-respected journals and conference proceedings. He has co-authored and co-edited several books. He is a Fellow of ACM, IEEE, AAAI, IAPR, and SPIE. He is the Chairman of ACM SIG Multimedia. Ramesh co-founded three companies, managed them in initial stages, and then turned them over to professional management. These companies were PRAJA in event-based business activity monitoring (acquired by Tibco); Virage for media management solutions and visual information management (a NASDAQ company acquired by Autonomy); and ImageWare for surface modeling, reverse engineering rapid prototyping, and inspection (acquired by SDRC). He recently co-founded Seraja to address needs of emerging EventWeb.

Talk Title: Computing in the Flat World

Technology has made the competitive world flat and created opportunities for ambitious countries to change their fortunes. Computing technology first addressed issues in data and computing using specialized computers and then entered the information and communication phase using personal computers. Now computing is poised to enter its phase in which it will deal with insights and experiences. In this phase new applications are likely to emerge that will extend benefits of computing from less than 1 Billion people to more than 3 Billion people. In this phase visual computing, including computer vision, has to play a dominant role. In this paper, we will discuss requirements of extending computing to masses in even remote areas of developing countries and identify challenges for experiential computing in general and computer vision in particular. We will identify challenges and opportunities for computer vision in extending benefits of computing to emerging countries.