That Thing In Pocket Is A Computer!
The Future of Mobile Computing

Abstract

This talk will describe a view of the future using mobile connected devices/telephones/tablets. It is obvious that in the very near future your mobile device may be your principal, if not only, way to communicate including your use of the Internet. I will describe new applications that will include the use of context-based information. A simple example of this is geo-location and other information relating to how a user is “using” the mobile device. I will also describe other applications including language translation, health care delivery, and the use of on-board sensors. The use of the imaging sensor (i.e. the camera) for non-imaging applications will be described. This talk will describe my view of where this mobile future is going and how it will be “good” for users but I will also address problems of privacy.

Edward J. Delp was born in Cincinnati, Ohio. He received the B.S.E.E. (cum laude) and M.S. degrees from the University of Cincinnati, and the Ph.D. degree from Purdue University. In May 2002 he received an Honorary Doctor of Technology from the Tampere University of Technology in Tampere, Finland.

From 1980-1984, Dr. Delp was with the Department of Electrical and Computer Engineering at The University of Michigan, Ann Arbor, Michigan. Since August 1984, he has been with the School of Electrical and Computer Engineering and the School of Biomedical Engineering at Purdue University, West Lafayette, Indiana.

In 2008 he was named a Distinguished Professor and is currently The Charles William Harrison Distinguished Professor of Electrical and Computer Engineering and Professor of Biomedical Engineering and Professor of Psychological Sciences (Courtesy).

His research interests include image and video compression, multimedia security, medical imaging, multimedia systems, communication and information theory. He has published and presented more than 500 papers.

Dr. Delp is a Fellow of the IEEE, a Fellow of the SPIE, a Fellow of the Society for Imaging Science and Technology (IS&T), and a Fellow of the American Institute of Medical and Biological Engineering. In 2004 he received the Technical Achievement Award from the IEEE Signal Processing Society for his work in image and video compression and multimedia security. In 2008 Dr. Delp received the Society Award from IEEE Signal Processing Society (SPS). This is the highest award given by SPS and it cited his work in multimedia security and image and video compression. In 2009 he received the Purdue College of Engineering Faculty Excellence Award for Research.

In 1990 he received the Honeywell Award and in 1992 the D. D. Ewing Award, both for excellence in teaching. In 2001 Dr. Delp received the Raymond C. Bowman Award for fostering education in imaging science from the Society for Imaging Science and Technology (IS&T). In 2004 he received the Wilfred Hesselberth Award for Teaching Excellence. In 2000 Dr. Delp was selected a Distinguished Lecturer of the IEEE Signal Processing Society.