The Department of Electrical and Computer Engineering Presents

A DISTINGUISHED SEMINAR

PROFESSOR GREGORY J. POTTIE

THE INTERNET OF THINGS: PREDICTIONS AND REALITY

ABSTRACT

The Internet of Things (IoT) has many definitions, but under any of them is widely predicted to transform our world through the infusion of networked sensing and processing into a vast array of physical objects, for applications ranging from home life to health care to intelligent manufacturing. The market is projected to be exponentially exploding, becoming perhaps the largest application of integrated circuits. This is exciting, but yet exactly the same predictions were made for wireless sensor networks around the year 2000, even including many of the same applications. What happened instead was the smart phone revolution. In this talk we explore why the predictions from Y2K were wrong (including mine), what has changed in the interim, what challenging problems remain, and therefore which predictions are more likely to come true in the short term than others.

BIOGRAPHY

Gregory J. Pottie received his B.Sc. in Engineering Physics from Queen's University, Kingston, Ontario in 1984, and his M.Eng. and Ph.D. in Electrical Engineering from McMaster University, Hamilton, Ontario, in 1985 and 1988 respectively. From 1989 to 1991 he worked in the transmission research department of Motorola/Codex in Canton MA, with projects related to voice band modems and digital subscriber lines. Since 1991 he has been a faculty member of the UCLA Electrical and Computer Engineering Department, serving in vice-chair roles from 1999-2003 and as Chair since 2015. From 2003-2009 he was the Associate Dean for Research and Physical Resources of the Henry Samueli School of Engineering and Applied Science, and from 2002-2012 he was deputy director of the NSF funded Center for Embedded Networked Sensing. His current research focus is on wireless communications and inference problems in educational technology. From 1997 to 1999 he was secretary to the board of governors for the IEEE Information Theory Society. In 1998 he received the Allied Signal Award for outstanding faculty research for UCLA engineering. In 2005 he became a Fellow of the IEEE for contributions to the modeling and applications of sensor networks. In 2009 he received a Fulbright Senior Scholar award. In 2012 he became the founding faculty director of the UCLA Tech Camp. In 2016 he was named a Distinguished Educator by the Engineers Council. Dr. Pottie is a member of the Bruin Master's Swim Club (butterfly) and the St. Mathew's Choir (2nd bass).

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