Keynote Talk

Life, the Universe, and the Future of Mobile Computing

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Abstract

Phenomenal growth in the performance and functionality of portable electronic devices has transformed our notion of mobile computing from its roots in the early 90's. In fact, some of the advances are so remarkable that 20 years ago they would have seemed improbable; the exponential growth in the density of solid-state storage being a prime example. Looking forward, can we expect a similar leap in mobile capabilities over the next 20 years? In this presentation, I will examine the trends in processing, storage, wireless networking, displays, data-entry, sensing and battery design, trying to predict the properties of future mobile computers. In order to better understand how the evolution of mobile technology will progress, I will also consider how our lives, needs and work practices might shape the design of these systems, and provide us with powerful tools that are not only functional, but enable a richer user experience.

Categories & Subject Descriptors: B. Hardware: B3 Memory Structures, B4.1 Data Communications and B4.2 Input/Output, B7.Integrated Circuits. J Computer Applications J.0 General.

General Terms: Performance, Design, Security & Human Factors

Bio: Roy Want is a Senior Principal Engineer at Intel Corporation, Santa Clara, California, and leader of the Ubiquity group. His research interests include mobile & ubiquitous computing, wireless protocols, hardware design, embedded systems, distributed systems, and automatic identification. He is Editor-in-Chief for IEEE Pervasive Computing, and holds the grade of IEEE & ACM Fellow.

MobiSys'08, June 17–20, 2008, Breckenridge, Colorado, USA.
ACM 978-1-60558-139-2/08/06.