



## IT Eminent Lecture Series

**Pervasive and Context Aware Computing****Dr. Daniel Siewiorek**

Professor of Computer Science Carnegie Mellon University

Coates Hall 152

March 26, 2004 - 03:00 pm

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The convergence of two basic research themes, Pervasive Computing and Wearable Computers, have enabled the emergence of Context Aware Computing. In this talk, Dr. Siewiorek will describe the merging of Carnegie Mellon University's Aura Pervasive Computing project with the Wearable Computing project and give examples of several initial Context Aware Computing applications. The effects of Moore's Law are apparent everywhere: chip density, processor speed, memory cost, disk capacity and network bandwidth are improving relentlessly. As the cost of computing plummets, a resource that we have ignored until now becomes the limiting factor in computer systems - human attention. By "human attention," he means the ability of a user to focus on his primary task, oblivious to system-generated distractions such as failures and poor performance. Discovering ways to reduce these distractions is a key aspect of the Aura Project. By trading off plentiful computing resources for the scarcest resource, human attention, we hope to create a system whose overall effectiveness is considerably higher than that of typical systems today.

**Speaker's Bio:**

Daniel Siewiorek is the Buhl University Professor in Carnegie Mellon University's School of Computer Science and Department of Electrical and Computer Engineering. He helped initiate and guide the Cm\* project that culminated in an operational 50-processor system. He was a key contributor in the design of over two dozen commercial computing systems and designed or was involved in designing nine multiprocessor systems. He guided the design of over two dozen generations of mobile computing systems. In addition, he has authored or co-authored eight books and over 400 papers. He is a Fellow of the IEEE and ACM, and a member of the National Academy of Engineering.

**This lecture has a reception.**

