

Distinguished Lecture Series

EECS COLLOQUIUM

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4:00 - 5:00 pm

306 Soda Hall
Hewlett-Packard
Auditorium

In-memory Database

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Abstract

When SQL and the relational data model were introduced 25 years ago as a general data management concept, enterprise software migrated quickly to this new technology. Despite the incredible improvements in computer hardware, high-speed networks, display devices and the associated software, speed and flexibility remained an issue.

In our proposal, the participants in enterprise applications, such as customers, orders, accounting documents, products, employees etc. will be modeled as objects and also stored and maintained as such. Despite that, the vast majority of business functions will operate on an in-memory representation of their objects. Using the relational algebra and a column-based data storage will allow us to revolutionize transactional applications while providing an optimal platform for analytical data processing. The unification of OLTP and OLAP workloads on a shared architecture and the reintegration of planning activities promise significant gains in application development while simplifying enterprise systems dramatically.

Biography

Prof. Dr. h.c. Hasso Plattner is a co-founder of SAP AG, where he served as the CEO until 2003 and has since been chairman of the supervisory board. SAP AG is today the leading provider of enterprise software solutions. In his role as chief software advisor, he concentrates on defining the mid- and long- term technology strategy and direction of SAP.

Hasso Plattner leads one of the research groups at HPI which focuses mainly on Memory-Based Data Management for Enterprise Applications and Human-Centered Software Design and Engineering.

For more information, please go online to:

<http://www.eecs.berkeley.edu/Colloquium/10spring/plattner.shtml>

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