Lorenzo Alvisi holds an Endowed Professorship in Computer Science at the University of Texas at Austin, where he co-leads the Laboratory for Advanced Systems Research (LASR). He received a Ph.D. in Computer Science from Cornell University, which he joined after earning a Laurea degree in Physics from the University of Bologna, Italy. His research interests are in the theory and practice of distributed computing, with a particular focus on dependability. He is a Visiting Chair Professor at Shanghai Jiao Tong University, a Fellow of the ACM, an Alfred P. Sloan Foundation Fellow, and the recipient of a Humboldt Research Award and of an NSF Career Award. He serves on the Editorial Boards of ACM TOCS and Springer's Distributed Computing and is a council member of the CRA’s Computing Community Consortium. In addition to distributed computing, he is passionate about classical music and red Italian motorcycles.

High performance ACID distributed databases via Modular Concurrency Control

Wednesday, June 3, 2015 ■ 12:30 ■ Meyer Bldg., Auditorium 1003
[Refreshments at 12:30, the lecture will start at 12:45]

Abstract: Since the elegant foundations of transaction processing were established in the mid 70’s with the notion of serializability and the codification of the ACID (Atomicity, Consistency, Isolation, Durability) paradigm, performance has not been considered one of ACID’s strong suits, especially for distributed data stores. Indeed, the NoSQL/BASE movement was born out of frustration with the limited scalability of traditional ACID solutions, only to become itself a source of frustration once the challenges of programming applications in this new paradigm began to sink in. But how fundamental is the dichotomy between performance and ease of programming?

This talk will describe Callas, a distributed database system that aims to unlock the performance potential of the ACID transactional paradigm, without sacrificing the generality and ease of programming that define it.

Professor Alvisi will also deliver an additional lecture as part of the 5th Annual Henry Taub International TCE Conference, on Scaling Systems for Big Data
Salt: Combining ACID and BASE in a Distributed Database
Monday, June 1, 2015 ■ 12:15 ■ Churchill Auditorium 1
[Refreshments at 11:15]

For further information see: http://webee.technion.ac.il/Vincent-Meyer-Colloquium

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