

15-410

Atomic Transactions

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So Who *Is* This Guy?

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- Ph.D. Computer Science (CMU 1988)
- Asst Professor of Computer Science (Stanford 1988-1989)
- Co-founder of Transarc Corp. (Bought in 1994 by IBM)
 - Transaction Processing Software
 - Distributed File Systems Software
- IBM Faculty Loan to CMU eCommerce Inst. (1999-2000)
- Joined SCS Faculty in 2001
- Lecture Style: ¿Questioning?

Do You Do ACID?

- What is ACID?
- The ACID Properties of a Transaction:
 - Atomicity: *all or none*
 - Consistency: *if before than after*
 - Isolation: *despite concurrent execution, \exists serial ordering*
 - Durability: *committed transaction cannot be undone*