

THURSDAY
OCTOBER 23, 2003

Scaife Hall Auditorium
Room 125

4:00 PM
Refreshments—3:30 PM



Erik Riedel
SEAGATE RESEARCH

Erik Riedel leads the Interfaces & Architecture Department at Seagate Research in Pittsburgh, Pennsylvania. The group focuses on novel storage systems with increased intelligence for optimized performance, automated management, and content-specific optimizations. A basic requirement for such systems is new interfaces to storage systems, as the current ones are quite outdated.

Before joining Seagate Research, he was a researcher in the storage program at Hewlett-Packard laboratories in Palo Alto, California working on networked and distributed storage and security for storage. He received a doctorate in Computer Engineering from Carnegie Mellon University working with David Nagle and Garth Gibson in the Parallel Data Lab (PDL) and Christos Faloutsos in the Center

For more information:
<http://amp.ece.cmu.edu/ECESeminar>

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INTERFACES & ARCHITECTURES FOR STORAGE - THE CHANGING LANDSCAPE

This talk will overview current work in the storage systems research group at Seagate Research. This is a new group formed last year with a charter to expand the intelligence and functional variety of storage devices. The trend toward additional device intelligence and "freedom" in various forms has been in place for many years, and customers are rapidly moving away from dollars/gigabyte as their primary goodness metric. This is pushing us to consider the "big picture" of how individual disk drives are used in larger systems, and how we best play our role in these systems. One of the key enablers for additional device intelligence is a change in the interfaces for talking to storage, and the talk will also briefly outline an industry proposal for object-based storage devices (OSD) which greatly expands the SCSI interface that has provided valiant service for the last 20 years.

Seagate Research is a young organization with an ambitious charter—to develop the storage technologies that will carry the company and the industry 5-10 years in the future. The lab has grown from two people in a rented office to 100 researchers in a brand-new building over the past four years. In addition to details about the systems efforts, the talk will very briefly mention ongoing projects in other parts of the lab and in the company. 