



**CAISS-IEEE  
Cloud Storage  
Seminar Series**

## **Future of Non-volatile Memory and SSD**

There are increasing applications of non-volatile memory devices and solid-state drives (SSD) in data centers for cloud computing. In spite of recent technological breakthroughs, many challenges occur as process geometry scales below 20nm. This seminar will summarize the current status of non-volatile memory devices with an emphasis on NAND flash memory. SSD and its controller technology will also be discussed. In light of recent advances in cloud computing, the applications of non-volatile memory and SSD in cloud storage will also be given.

### **Dr. Hao Zhong, Fusion-io Inc**

Dr. Zhong is the Senior Director of NAND flash engineering at Fusion-io. He has extensive experience on algorithms and VLSI architecture for SSD controller and HDD read channel. Prior to Fusion-io, Dr. Zhong was the Director of flash channel engineering at Sandforce. Prior to SandForce, he was an architect at LSI Corporation, where he worked on LDPC, SOVA/BCJR and Turbo equalization.

Fusion-io Inc (Fusion) is a provider of data-centric computing solutions: a combination of hardware and software that places data closer to processing. Its NAND flash-based ioMemory is designed for data center applications.

### **2012 CAISS-IEEE Cloud Storage Series**

Cloud storage is a model of networked online storage that is usually operated through large scale data storage centers. The increasing popularity in cloud storage has presented tremendous opportunities as well as challenges to information storage industry. In 2012 CAISS and IEEE Data Storage Technical Committee will bring together experts from storage industry to discuss various storage technologies and their applications in cloud storage. Stay tuned for more CAISS-IEEE Cloud Storage events!

**Time:** 2-3:30pm, Sunday, April 29th, 2012

**Location:** Pacific Rim Conference Room, Western Digital Media Center,  
1710 Automation Parkway, San Jose, CA

**RSVP:** <http://caisscloud1.eventbrite.com/>

*CAISS is a non-profit organization that serves Silicon Valley high-tech community through promoting technology innovation, entrepreneurial development and global business communication and collaboration.*

*IEEE Communications Society Data Storage Technical Committee is an IEEE professional organization aimed at promoting communications and signal processing technologies related to storage systems.*