Memory

Memory

Storage

Memory

http://depositphotos.com/3735495/stock-photo-Kids-writing-in-sand.html

Storage

http://www.bbc.co.uk/news/uk-england-leeds-15157345

Persistent Memory

http://www.lookandlearn.com/blog/21315/sumerian-civilisation-and-the-birth-of-writing/

Memory

Storage

Persistent Memory

🔥 *Dry it*

How to Turn Data Updates Into Permanent Records?

How to Turn Data Updates Into Permanent Records?

Previous: With "Log"

Leave original data intact

How to Turn Data Updates Into Permanent Records?

Previous: With "Log"

Leave original data intact

Our Design: "Kiln"

Directly overwrite original data

How to Turn Data Updates Into Permanent Records?

Previous: With "Log"   *Our Design: "Kiln"*

3x

speedup across 6 benchmarks

Leave original data intact   Directly overwrite original data

Details about "Kiln"

Closing the Performance Gap Between Systems With and Without Persistence Support

Jishen Zhao — Penn State
Sheng Li — HP Labs
Doe Hyun Yoon — IBM Research
Yuan Xie — Penn State/AMD Research
Norm Jouppi — Google

▶ **Poster Session: Tue (Dec.10) 2 – 3PM**

Presentation: **Wed (Dec. 11) 9:45AM**
                          Session 6B
                          (Alpha Gamma Rho Room)

PENN STATE 1855

MICRO 2013

hp