

Wenbo Lang

Intended job : software developer

Gender : Male

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Age : 24

Github : github.com/slfs007

Educational background

2014. 9–2017. 1	Northeastern University	School of Computer Science and Engineering	Software engineering and Theoretical Computer Science	Master
2010. 9–2014. 6	Southwest University of Science and Technology	School of Information Engineering	Automation	Bachelor

Projects

2016. 8 – **Filesystem in Userspace Based on TerarkDB**
2016. 9 By using FUSE frame and using Terark as database, this program realized POSIX. As a result, data migration can be achieved effectively. At the same time, this program improved I/O speed and reduced disk usage.
I was in charge of programming and frame design in this project. It was programmed in C++, and mainly concerned realization of POSIX.
Address: <https://github.com/terark/terark-fuse>
2016. 07 – **Real-time Storage Engine Testing Framework**
2016. 8 During testing period, this framework can adjust read/write rate, sampling rate, thread numbers and display QPS, memory, CPU utilization on website in real time. Now this frame is used in TerarkDB, WiredTiger and Rocksdb.
I was in charge of back-end programming in C++, regarding multi-threaded programming, thread synchronization and web communication etc.
Address: <https://github.com/terark/terarkdb-tests>
2015. 10 – **MK-Redis**
2016. 3 MK-Redis is Key-Valued database based on Redis source code. It enhanced internal storage model in Redis, and adopted a new fast checkpoint recovery algorithm called MK. MK-Redis can guarantee no latency during checkpoints. In the YCSB benchmark , the max latency of MK-Redis is reduced by 50%~60%.
I designed MK algorithm and simulation program, and realize MK algorithm in Redis.
Address: <https://github.com/slfs007/mk-redis-v3>

Skills

- Programming languages: C/C++, Python, Java
- Expertise in Operating System, Computer Network, Data Structure, Algorithm and Multithreaded Programming).
- Source Code in Redis
- Familiar with Commands in Linux and Shell, Makefile, CMake file.
- Basics of Git and GDB
- CET-6

Internship

2016.07-now

Terark

Database Development

High-performance storage engine (TerarkDB) is the main product of the company. During the internship, I realized the real-time storage engine testing framework and filesystem in userspace for TerarkDB.

Research & Awards

- Master thesis: *Study on Critical Technology for In-memory Database and Fault Tolerance*.
- Working for paper *Efficient Main-Memory Checkpointing Algorithms for Frequent Update Applications*
- Huawei Code Craft (2015): Northeast Division Beijing-Tianjin Top 32
- Huawei Code Craft (2016): Northeast Division Beijing-Tianjin Top 32