

Nuoxian Wang

WeChat&Tel: 13959288816 | Email: bosswnx@qq.com | GitHub: [bosswnx](https://github.com/bosswnx) | Website: bosswnx.xyz

Education

Nanjing University (985)	2025/09 – 2027/06 (Expected)
Master, School of Intelligent Software and Engineering, Software Engineering	
University of Science and Technology Beijing (211)	2021/09 – 2025/06
Bachelor, School of Computer and Communication Engineering, Internet of Things Engineering	

Skills

Languages: C/C++, Rust (proficient); Python (familiar)

Research Interests: Linux Kernel, RISC-V SBI, Database Kernel

Experience

Tencent Cloud, Big Data OLAP R&D Intern	2026/05 – Present
Maintained and developed Tencent Cloud TCHouse-D (based on Apache Doris), diagnosing and fixing FE/BE issues and contributing upstream. Three of five independently submitted PRs have been merged into Apache Doris mainline.	
• 67310 (FE / Java, under review): Fixed an availability bug after master FE failover: a non-master FE with lagging journal replay kept forwarding statements to the stale old master for up to 300s, and FORWARD_WITH_SYNC statements hung for up to 18 minutes. Receiver now rejects up front with a structured NOT_MASTER result; sender falls back to bdbje leader lookup / follower probing to rediscover the master and retries once. Includes a 4-FE docker + iptables fault-injection reproduction plus 5 unit tests. • 67442 (BE / C++, merged): Fixed an ASAN heap-use-after-free in SharedMemtable destruction under group commit: the flush task held only a weak reference to FlushToken; once run()'s local shared_ptr dropped the last reference, cascaded destruction tore down RowsetWriterContext before ~SharedMemtable() finished dereferencing it. The LSN map is now captured at submission via shared_ptr, keeping just the precise cleanup dependency alive (without extending RowsetWriter's lifetime); added UAF regression tests. • 65659 (FE / Java, merged): Reproduced and diagnosed a TOCTOU race in Nereids external-table partition pruning – the partition map was frozen during plan construction but sorted partition ranges were re-read during pruning. A concurrent ALTER TABLE ADD/DROP PARTITION cache refresh could mix snapshots, causing binary-search pruning to return a partition absent from the old map and trigger an NPE. • 63537 (BE / C++, merged): Replaced the fixed configured interval used for Workload Group CPU and Scan IO rate calculations with the actual monotonic-clock interval, correcting metric inaccuracies caused by scheduling delays or runtime configuration changes; added division-by-zero protection and unit tests. • 67404 (FE / Java, under review): Aligned two long-failing unit-test assertions on master with the behavior intentionally introduced by later PRs (Iceberg OCC snapshot fence, V1 inverted-index format deprecation); updated assertions and added semantic comments.	

KernelSoft, OS R&D Intern	2024/01 – 2024/05
Participated in R&D of a self-developed intelligent cockpit real-time OS. Ported procs-related features into the kernel, merged into the company's internal mainline.	

Projects

SBI-Fuzz	2025/09 – Present
Individual research project: automated fuzzing tool for RISC-V SBI bootloaders. Auto-generates test cases from SBI spec interfaces and executes them on QEMU, with code coverage and seed mutation. Two RustSBI bugs found and confirmed by the community.	
MiniOB	2024/09 – 2024/10
CSCC (OceanBase Database Competition) entry: simplified database kernel built as team lead (over half the tasks: update, B+Tree, expressions, functions). Perfect preliminary score; ranked 19th nationally, 3rd in Beijing. GitHub: https://github.com/bosswnx/miniob-2024	
chaos	2024/01 – 2024/08
CSCC (OS Kernel Implementation) entry: Unix-like kernel in Rust built on Tsinghua's rCore; multi-process, ext4, VisionFive 2. National 2nd Prize. GitHub: https://github.com/bosswnx/chaos	

Awards

CSCC (OceanBase Database Competition)	Provincial 3rd Place	2024/12
CSCC (OS Kernel Implementation)	National 2nd Prize	2024/08
CCPC (Regional) Jinan	Bronze Medal	2023/12
ICPC (Regional) Nanjing	Bronze Medal	2023/11
MCM/ICM Mathematical Contest in Modeling	Honorable Mention	2023/02