Jun Kong

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RESEARCH INTERESTS

- Operating System
- Distributed System

EDUCATIONS

Lanzhou University **Lanzhou, China**
Bachelor of Engineering in Computer Science and Technology SEP 2019 - JUN 2023
GPA: Average Score 85/100 (Top 10%)
HONOUR:

- Second-Class Scholarship(Top 10%)
- First-Class Scholarship(Top 5%)

PROJECT EXPERIENCE

LZU OS: A 64-bit teach-oriented OS kernel running on RISC-V NOV 2020 - APR 2022
Project at School of Information Science and Engineering, Lanzhou University, Advised by Associate Prof. Li Liu

- Wrote code of device tree, inline assembly, virtual memory, process management, memory allocator.
- Ported buddy-system allocator and SLAB allocator from Linux 2.6 to this system. LINK
- Wrote tutorials to teach how to write an OS step by step.
- Won the Award of excellence of China National College Student Computer System Ability Contest 2021.

Design a RISC-V CPU using chisel HDL JUN 2021 - MAR 2022
Project at School of Information Science and Engineering, Lanzhou University, Advised by Associate Prof. Anping He

- Designed a two-stage pipelined RISC-V CPU and completed simulation.
- Gained an understanding of how the CPU works and discovered interest in RISC-V and system research.

INTERNSHIP EXPERIENCE

Megvii Technology JUN 2022 - OCT 2022
Software Development Intern
I worked on a cloud-native orchestration and package management system based on the Megvii cloud platform.

- Added support for OCI(*Open Container Initiative*) standard and transformed packages to OCI artifact format.

WORK EXPERIENCE

Megvii Technology JUN 2023 - PRESENCE
Software Development Engineer
I am working on large-scale storage system at MEGVII Brain++(A leading AI productivity platform), including object storage system and small-file accelerating system.

Overlay: Megvii's Object Storage System
An object storage system based on LSM-Tree with more than 100 PiB data in production environment.

- Improved stability by fixing severe bugs, such as system hang caused by problematic heartbeats.
- Provided efficient maintenance and on-call support.

Nori: small-file accelerating system for Machine Learning
An small-file accelerating system with 600GB/s throughput and 500k QPS.

- Introduced priority scheduling and improved the quality of service and fairness.
- Redesigned database access patterns and significantly improved TPS.

- Provided efficient maintenance and on-call support.

AWARDS AND HONORS

- Lanzhou University Outstanding Graduation Thesis LINK
- The China National College Student Computer System Ability Contest 2021, Award of excellence
- Lanzhou University Second-Class Scholarship(Top 10%)
- Lanzhou University First-Class Scholarship(Top 5%)

SKILLS

- Proficient in C, Python, Go and Bash.
- Experienced in Kubernetes.
- Familiar with OS development.