HENGYUE KANG

■ kanghengyue@gmail.com

EDUCATION

China University of Geosciences (CUG), Wuhan, China

2020 – Present

B.Eng Li Siguang Class in Computer Science and Technology, expected June 2023

- GPA:89.95/100
- A Courses:Computer System, Big Data System and 16 others

China University of Geosciences (CUG), Wuhan, China

2019 - 2020

B.Eng in Applied Chemistry

RESEARCH INTEREST

Storage Engine, Distributed System, Erasure Coding, Database

EXPERIENCE

Advanced Dependable Storage Technology Lab, Huazhong University of Science and Technology Oct.2021 – Present

Research Intern Advisor: % Yuchong Hu

- Read papers and code of <u>CECHash</u> and <u>CECHash</u> to be familiar with **Erasure Coding** and in-memory cache storage engine.
- Migrated schemes for effective erasure coding **update** in LogECMem to **O** <u>Fatcache</u> clusters using **O** <u>Libmemcached</u> and modified fatcache to only use SSD as storage media.
- Designed and implemented Lazy Garbage Collection scheme for Full-Stripe update, reduced 32.8% latency even in update-heavy scenario and 40% IOs to maintain endurance of SSD at the expense of rational disk overhead.

Li Siguang Project, China University of Geosciences

- Only **41 students** are selected from the same grade and the complete credit system promises more flexible major and class choices for individuals.
- Participated in complex multi-view data representation learning and clustering method research, constructed baselines for single-cell clustering.

SELECTED PROJECTS

Optimization For xv6 Operating System xv6

Jan. – Mar. 2021

- Implemented **Copy-On-Write Fork** for xv6 to defer allocating and copying physical memory pages for the child process until the copies are actually needed.
- Added a feature to xv6 that periodically alerts a process as it uses CPU time and implemented a primitive form of user-level interrupt/fault handlers.

SELECTED AWARDS

Academic Excellence Scholarship

2021

SKILLS

- Programming Languages: C/C++, Python
- Tech Skills:Fatcache, Libmemcaced, Memcached, Git, GDB, LevelDB
- Languages: English IELTS(R7.0L7.0W6.5S6.0), Mandarin Native speaker