

Name: Congming Gao

Gender: male

Mobile Phone: +86 15320324331

E-mail: [albertgaocm@gmail.com](mailto:albertgaocm@gmail.com)

Address: Room 611, Main Building, No. 174 Shazhengjie, Shapingba, Chongqing, 400044, China

#### Education:

1. 2014.9-Present Chongqing University, study for Ph.D.'s degree, Major: Computer Science and Technology.
2. 2010.9-2014.6 Chongqing University, Bachelor's degree in College of Computer Science, Major: Information Security

#### Awards and Group Memberships:

- 1, Doctoral Students National Scholarship (2014);
- 2, Doctoral Students National Scholarship (2015).

#### Publications:

1, **Congming Gao**, Liang Shi, Mengying Zhao, Chun Jason Xue, Kaijie Wu, and Edwin Sha. "Exploiting Parallelism in IO Scheduling for Access Conflict Minimization in Flash-based Solid State Drives". (The 30th International Conference on Massive Storage Systems and Technology, MSST'14) –**Published**

2, **Congming Gao**, Liang Shi, Kaijie Wu, Chun Jason Xue, and Edwin H.-M. Sha. "Exploit Asymmetric Error Rates of Cell States to Improve the Performance of Flash Memory Storage Systems". (The 32nd IEEE International Conference on Computer Design, ICCD'14) –**Published**

3, Qiao Li, Liang Shi, **Congming Gao**, Kaijie Wu, Jason Chun Xue, Qingfeng Zhuge and H.-M. Edwin Sha. "Maximizing IO Performance via Conflict Reduction for Flash Memory Storage Systems". (The 2015 Design, Automation & Test in Europe Conference, DATE'15) –**Published**

4, Yeji Di, Liang Shi, **Congming Gao**, Kaijie Wu, Chun Jason Xue and Edwin H.-M. Sha. "Minimizing cell-to-cell interference by exploiting differential bit impact characteristics of scaled MLC NAND flash memories". (Non-Volatile Memory Systems and Applications Symposium, NVMSA'16) –**Published**

5, Edwin H.-M. Sha, **Congming Gao**, Liang Shi, Kaijie Wu, Mengying Zhao and Chun Jason Xue. "Asymmetric Error Rates of Cell States Exploration for Performance Improvement on Flash Memory based Storage Systems". (IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016) –**Published**

6, **Congming Gao**, Liang Shi, Cheng Ji, Yeji Di, Kaijie Wu, Chun Jason Xue and Edwin H.-M. Sha. "Exploiting Parallelism for Access Conflict Minimization in Flash-based Solid State Drives". (IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017) –**Published**

7, **Congming Gao**, Liang Shi, Yeji Di, Qiao Li, Chun Jason Xue, Kaijie Wu and Edwin H.-M. Sha. "Exploiting Chip Idleness for Minimizing Garbage Collection Induced Chip Access Conflict on SSDs". (ACM Transactions on Design Automation of Electronic Systems, 2017) –**Published**

8, Cheng Ji, Li-Pin Chang, Liang Shi, **Congming Gao**, Chao Wu, YuanGang Wang, Chun Jason Xue. "Lightweight Data Compression for Mobile Flash Storage". (ACM Transactions on Embedded Computing Systems (TECS) - Special Issue ESWEEK, 2017) –**Published**

9, Yeji Di, Liang Shi, **Congming Gao**, Qiao Li, Kaijie Wu and Chun Jason Xue. "Loss is Gain: Shortening Data for Lifetime Improvement on Low-Cost ECC Enabled Consumer-Level Flash Memory". (The 2018 Great Lakes Symposium on VLSI, GLSVLSI'18) – **Published**

10, **Congming Gao**, Liang Shi, Yeji Di, Qiao Li, Chun Jason Xue and Edwin H.-M. Sha. "An Efficient Cache Management Scheme for Capacitor Equipped Solid State Drives". (The 2018 Great Lakes Symposium on VLSI, GLSVLSI'18) –**Published**

11, Qiao Li, Liang Shi, **Congming Gao**, Yeji Di, Chun Jason Xue. "Access Characteristic Guided Read and Write Regulation on Flash based Storage Systems". (IEEE Transactions on Computers, 2018) –**to appear**

12, Yeji Di, Liang Shi, **Congming Gao**, Qiao Li, Chun Jason Xue and Kaijie Wu, "Minimizing Retention Induced Refresh Through Exploiting Process Variation of Flash Memory". (IEEE Transactions on Computers, 2018) –**to appear**

13, Yeji Di, Liang Shi, **Congming Gao**, Qiao Li and Chun Jason Xue. "Revisiting Wear Leveling Design on Compression Applied 3D NAND Flash Memory: work-in-progress", (The Proceedings of 2018 International Conference on Hardware/Software Codesign and System Synthesis, CODES+ISSS'18) –**to appear**

14, **Congming Gao**, Yeji Di, Aosong Deng, Duo Liu, Cheng Ji, Chun Jason Xue and Liang Shi. "Flash Friendly File System Aware Mapping Cache Design on Solid State Drives". (The 7th IEEE Non-Volatile Memory Systems and Applications Symposium, NVMSA'18) –**to appear**

