

107 年 2 月 通過 學術審查

年 級：博 三 (104 上入學)

著作列表

Journal Papers

1. **Shuo-Han Chen**, Tseng-Yi Chen, Yuan-Hao Chang, Hsin-Wen Wei, and Wei-Kuan Shih, “UnistorFS: A Union Storage File System Design for Resource Sharing between Memory and Storage on Persistent RAM based Systems,” accepted and to appear in ACM Transactions on Storage (TOS).
投稿時間: 2 Step. 2017
被接受時間: 5 Jan. 2018
出版者: ACM
出版時間: N.A.
SCI 論文: 是 否
SCI Impact Factor: 1.618
2. Tseng-Yi Chen, Yuan-Hao Chang, **Shuo-Han Chen**, Chih-Ching Kuo, Ming-Chang Yang, Hsin-Wen Wei, and Wei-Kuan Shih, “wrJFS: A Write-Reduction Journaling File System for Byte-addressable NVRAM,” accepted and to appear in IEEE Transactions on Computers (TC).
投稿時間: 29 Jun. 2017
被接受時間: 5 Jan. 2018
出版者: IEEE
出版時間: N.A.
SCI 論文: 是 否
SCI Impact Factor: 2.916
3. Tseng-Yi Chen, Yuan-Hao Chang, **Shuo-Han Chen**, Nien-I Hsu, Hsin-Wen Wei, and Wei-Kuan Shih, “On Space Utilization Enhancement of File Systems for Embedded Storage Systems,” ACM Transactions on Embedded Computing Systems (TECS), vol. 16, no. 3, pp. 83:1-83:28, Apr. 2017.
投稿時間: 27 Nov. 2015
被接受時間: 9 Apr. 2016
出版者: ACM
出版時間: Jul. 2017
SCI 論文: 是 否

Conference Papers

1. Shuo-Han Chen, Tseng-Yi Chen, Yuan-Hao Chang, Hsin-Wen Wei, and Wei-Kuan Shih, "Enabling Union Page Cache to Boost File Access Performance of NVRAM-Based Storage Devices", accepted and to appear in 55th ACM/IEEE Design Automation Conference (DAC), San Francisco, USA, Jun. 24-28, 2018.
2. Yong-Ching Lin, Shuo-Han Chen, Yuan-Hao Chang, Tseng-Yi Chen, Hsin-Wen Wei, and Wei-Kuan Shih, "Log-based Cache Design for Sequential-Write-Constrained Shingled Magnetic Recording Disks", accepted and to appear in Work-in-Progress Session of 55th ACM/IEEE Design Automation Conference (DAC), San Francisco, USA, Jun. 24-28, 2018.
3. Yu-Pei Liang, Tseng-Yi Chen, Yuan-Hao Chang, Shuo-Han Chen, Hsin-Wen Wei, and Wei-Kuan Shih, "B*-sort: Enabling Write-once Sorting Algorithm for Byte-addressable Non-volatile Memory", accepted and to appear in Work-in-Progress Session of the 55th ACM/IEEE Design Automation Conference (DAC), San Francisco, USA, Jun. 24-28, 2018.
4. Shuo-Han Chen, Yen-Ting Chen, Hsin-Wen Wei, and Wei-Kuan Shih, "Boosting the Performance of 3D Charge Trap NAND Flash with Asymmetric Feature Process Size Characteristic", 54th ACM/IEEE Design Automation Conference (DAC), Austin, USA, Jun. 18-22, 2017.
5. Tseng-Yi Chen, Yuan-Hao Chang, Shuo-Han Chen, Chih-Ching Kuo, Ming-Chang Yang, Hsin-Wen Wei, and Wei-Kuan Shih, "Enabling Write-Reduction Strategy for Journaling File Systems over Byte-addressable NVRAM," ACM/IEEE Design Automation Conference (DAC), Austin, Texas, USA, Jun. 18-22, 2017.
6. Shuo-Han Chen, Jun-Long Lin, Tseng-Yi Chen, Tsan-Sheng Hsu, Hsin-Wen Wei and Wei-Kuan Shih, "Mitigating the Write Amplification Problem of Write-Optimized File Systems on Flash Storage," IEEE International Conference on Cluster Computing (CLUSTER), Hawaii, USA, Sept. 5-8, 2017.
7. Li-Zheng Liang, Ming-Chang Yang, Yuan-Hao Chang, Tseng-Yi Chen, Shuo-Han Chen, Hsin-Wen Wei, and Wei-Kuan Shih, "xB+-Tree: Access-Pattern-Aware Cache-Line-Based Tree for Non-Volatile Main Memory Architecture", IEEE 41th Annual Computer Software and Applications Conference (COMSPAC), Turin, Italy, Jul. 4-8, 2017.
8. Shuo-Han Chen, Wei-Shin Li, Min-Hong Shen, Yi-Han Lien, Tseng-Yi Chen, Tsan-sheng Hsu, Hsin-Wen Wei, and Wei-Kuan Shih, "An Update-Overhead-Aware Caching Policy for Write-Optimized File Systems on

- SMR Disks”, 36th IEEE — International Performance Computing and Communications Conference (IPCCC 2017), San Diego, USA, Dec. 10–12, 2017.
9. **Shuo-Han Chen**, Chi-Heng Lee, Tseng-Yi Chen, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, ”Analysis and improvement of the 3-star algorithm for the STP-MSP problem in Wireless Sensor Networks”, 2017 International Conference on Computing, Networking and Communications (ICNC), Silicon Valley, USA, Jan. 26-29, 2017.
 10. **Shuo-Han Chen**, Yu-Pei Liang, Chi-Heng Lee, I-Ju Wang, and Wei-Kuan Shih, “A wireless sensor network simulator focuses on imitating wireless charging vehicle: demo abstract”, 16th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), Pittsburgh, USA, Apr. 18-21, 2017.
 11. Yu-Pei Liang, **Shuo-Han Chen**, Yi-Han Lien, Tseng-Yi Chen, Heng-Yin Chen, and Wei-Kuan Shih, “Enabling High-Resolution Video Support for the Next-Generation Internet-Connected Display“, 2017 IEEE Cyber Science and Technology Congress (CyberSciTech 2017), Orlando, USA, Nov. 6-10, 2017.
 12. **Shuo-Han Chen**, Pei-Yu Chen, Yu-Pei Liang, Heng-Yin Chen, Yen-Ting Chen, and Wei-Kuan Shih, “Folding state recognition for multi-foldable mobile devices”, IEEE SoutheastCon 2017, Concord, USA, Mar. 30 – Apr. 2, 2017.
 13. **Shuo-Han Chen**, I-Ju Wang, Tseng-Yi Chen, Hsin-Wen Wei, Tsan-Sheng Hsu and Wei-Kuan Shih, “Enhancing Usability for the Wireless Charging Vehicle Simulator”, 26th International Conference on Computer Communications and Networks (ICCCN), Vancouver, Canada, Jul. 31 – Aug. 3, 2017.
 14. **Shuo-Han Chen**, Min-Hong Shen, Yung-Chun Chang, Tseng-Yi Chen, Tsan-sheng Hsu, Hsin-Wen Wei, Wei-Kuan Shih, “Utilizing Multi-level Data Fault Tolerance to Conserve Energy on Software-Defined Storage”, The 2nd IEEE International Conference on Smart Cloud 2017 (SmartCloud 2017), New York, USA, Nov. 3 – Nov. 5, 2017.
 15. **Shuo-Han Chen**, Yung-Chun Chang, Tseng-Yi Chen, Tsan-Sheng Hsu, Hsin-Wen Wei and Wei-Kuan Shih, “Enabling Multi-level Data Fault Tolerance on Software-Defined Storage System”, 2017 IEEE International Conference on Cloud and Autonomic Computing (ICCAC), Tucson, USA, Sept. 18-22, 2017.
 16. Tseng-Yi Chen, Yuan-Hao Chang, Chien-Chung Ho, and **Shuo-Han Chen**, “Enabling sub-blocks erase management to boost the performance of 3D NAND flash memory”, 53rd ACM/IEEE Design Automation Conference (DAC), Austin, USA, Jun. 5-9, 2016. **(Best Paper Nomination (16/674))**
 17. **Shuo-Han Chen**, Yen-Ting Chen, Yu-Pei Liang, Yong-Ching Lin, Heng-Yin Chen, and Wei-Kuan Shih, “Improving the Local Disk Cover Algorithm for

- Placing Relay Nodes in a Wireless Sensor Network”, 2016 International Conference on Collaboration Technologies and systems (CTS), Orlando, USA, Oct. 31- Nov. 4, 2016.
18. Fu-Nan Huang, Tseng-Yi Chen, **Shuo-Han Chen**, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, “ShareEnergy: Configuring Mobile Relays to Extend Sensor Networks Lifetime Based on Residual Power”, 2016 International Conference on Collaboration Technologies and Systems (CTS), Orlando, USA, Oct. 31- Nov. 4, 2016.
 19. **Shuo-Han Chen**, Tseng-Yi Chen, Yu-Chun Cheng, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, “Developing a user-friendly sensor network simulator to imitate wireless charging vehicle behaviors”, 2016 International Conference on Computing, Networking and Communications (ICNC), Kauai, USA, Feb. 15-18, 2016.
 20. **Shuo-Han Chen**, Tseng-Yi Chen, Chi-Heng Lee, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, “Exploiting the locality of virtual-machine images to boost the performance of a cloud platform”, 37th IEEE Sarnoff Symposium, Newark, USA, Sept. 19-21, 2016.
 21. **Shuo-Han Chen**, Yu-Chun Cheng, Chi-Heng Lee, Sheng-Po Wang, Heng-Yin Chen, Tseng-Yi Chen, Hsin-Wen Wei, and Wei-Kuan Shih, “Extending sensor network lifetime via wireless charging vehicle with an efficient routing protocol”, IEEE SoutheastCon 2016, Norfolk, USA, Mar. 30 – Apr. 3, 2016.
 22. Chi-Heng Lee, Tseng-Yi Chen, **Shuo-Han Chen**, Hsin-Wen Wei, Heng-Yin Chen, and Wei-Kuan Shih, “Rescuing moribund NVM-based sensor nodes by an energy-efficient WCV routing algorithm”, 37th IEEE Sarnoff Symposium, Newark, USA, Sept. 19-21, 2016.
 23. Hsin-Wen Wei, Tseng-Yi Chen, **Shuo-Han Chen**, Nai-Yuan Jhang, Li-Zheng Liang, Chih-Ching Kuo, Tsan-sheng Hsu, and Wei-Kuan Shih, "A QoS-Aware Data Reconstruction Strategy for a Data Fault-Tolerant Storage System," 2015 IEEE 7th International Conference on Cloud Computing Technology and Science (CloudCom), Vancouver, Canada, 30 Nov.-3 Dec. 2015.
 24. Shih-Wen Hsu, Tseng-Yi Chen, Yun-Chun Chang, **Shuo-Han Chen**, Han-Chieh Chao, Tsen-Yeh Lin, and Wei-Kuan Shih, “Design a Hash-Based Control Mechanism in vSwitch for Software-Defined Networking Environment,” IEEE International Conference on Cluster Computing (CLUSTER), Chicago, USA, Sept. 8-11, 2015.
 25. **Shuo-Han Chen**, Tseng-Yi Chen, Hsin-Wen Wei, Nai-Yuan Jhang, Tsan-sheng Hsu, and Wei-Kuan Shih, “A Study of Suitable Fault Tolerance Frameworks for an Energy-efficient Storage System,” 2015 International Conference on

Collaboration Technologies and Systems (CTS), Atlanta, USA, Jun. 01 – 05, 2015.

26. **Shuo-Han Chen**, Yung-Chun Chang, Tseng-Yi Chen, Yu-Chun Cheng, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, “Prolong Lifetime of Dynamic Sensor Network by an Intelligent Wireless Charging Vehicle”, 82nd IEEE Vehicular Technology Conference (VTC2015-Fall), Boston, USA, Sept. 6-9, 2015.

Local Conference

1. **Shuo-Han Chen**, Yu-Pei Liang, Chien-Ju Lee, Sheng-Po Wang, Heng-Yin Chen, and Wei-Kuan Shih, “User Interface Simulation for Flexible Displays,” 2017 International Display Manufacturing Conference (IDMC 2017), Taipei, Taiwan, Sep. 20-22, 2017.
2. Yong-Ching Lin, **Shuo-Han Chen**, Tseng-Yi Chen, Yuan-Hao Chang, Ming-Chang Yang, Hsin-Wen Wei, and Wei-Kuan Shih, “Management Designs for Emerging Shingled Magnetic Recording Drives,” Symposium on Digital Life Technologies (DLT), Pingtung, Taiwan, Jun. 18-19, 2016. (**Best Paper Award**)

In progress of submission

- Journal Papers

1. **Shuo-Han Chen**, Yuan-Hao Chang, Yu-Pei Liang, Hsin-Wen Wei, and Wei-Kuan Shih, “An Erase Efficiency Boosting Strategy for 3D Charge Trap NAND Flash,” submitted to the IEEE Transactions on Computer. (Major Revision.)
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SCI Impact Factor: 2.916
2. **Shuo-Han Chen**, Yen-Ting Chen, Yuan-Hao Chang, Hsin-Wen Wei, and Wei-Kuan Shih, “A Progressive Performance Boosting Strategy for 3D Charge-trap NAND Flash,” submitted to the IEEE Transactions on Very Large Scale Integration Systems. (Major Revision.)
投稿時間: 6 Dec. 2015
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出版者: ACM

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SCI 論文:是■ 否□

SCI Impact Factor: 1.698

- **Conference Papers**

1. **Shuo-Han Chen**, Min-Hong Shen, Yu-Pei Liang, Tseng-Yi Chen, and Wei-Kuan Shih, “Facilitate External Sorting for Large-scale Storage on Shingled Magnetic Recording Drives”, submitted to IEEE SoutheastCon 2018, Tampa, USA, Apr. 19 – Apr. 22, 2017.