

Author's Publications

Journal Papers

- (i) **Junpeng Niu**, Jun Xu, Lihua Xie, “Hybrid Storage Systems: A Survey of Architectures and Algorithms”, Submitted to *IEEE Access* 2017
- (ii) **Junpeng Niu**, Mingzhou Xie, Jun Xu, Li Xia, Lihua Xie, “Theoretical Analysis of SMR Drive Performance under Different Workload Environment”, Submitted to *Control Engineering Practice* 2017.

Conference Papers

- (i) **Junpeng Niu**, Jun Xu, Lihua Xie, “Online Fuzzy Logic Control With Decision Tree For Improving Hybrid Cache Performance”, IEEE ICCA, 2016.
- (ii) **Junpeng Niu**, Jun Xu, Lihua Xie, “Analytical Modeling of SMR Drive under Different Workload Environments,” *IEEE ICCA*, 2017.
- (iii) **Junpeng Niu**, Jun Xu, Lihua Xie, “A Deep Look at SMR Performance via Simulation Approach”, *IEEE ICCA*, 2017.
- (iv) **Junpeng Niu**, Jun Xu, Lihua Xie, “Optimal Selection of Garbage Collection Dirty Threshold to Balance Power Consumption and Space Release”, *IEEE CAC*, 2017

Patents

- (i) Jun Xu, Wei Xi, Guoxiao Guo, Jianyi Wang, **Junpeng Niu**, “Media Based Cache For Data Storage Device” , US Patent Application No 14/857,467, 10/2015

- (ii) **Junpeng Niu**, Jun Xu, Lihua Xie, “Online Fuzzy Logic Control With Decision Tree For Improving Hybrid Cache Performance” , US Patent Application No 62/267,195, 12/2015
- (iii) Jun Xu, Shaun Astarabadi, Grant Mackey, **Junpeng Niu**, Robin O’Neill, Jie Yu, “Flexible Storage Implementation for DASH and/or SVC with VCA”, Accepted for US patent application filing, 05/2016
- (iv) Jun Xu, **Junpeng Niu**, Jie Yu, William Bernard Boyle, “Hybrid Storage Array”, Accepted for US patent application filing, 08/2017