

# SHULIN ZHAO

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## EDUCATION

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### Pennsylvania State University

2016 - present

Ph.D. Candidate in Computer Science and Engineering

Advisors: Prof. Mahmut Taylan Kandemir and Prof. Anand Sivasubramaniam

Overall GPA: 3.9/4.0

### Shandong University

2013 - 2016

M.S. in Computer Science and Technology

Overall GPA: 3.8/4.0

### Shandong University

2008 - 2012

B.S. in Control Science and Engineering

Overall GPA: 3.2/4.0

## RESEARCH EXPERIENCE

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### Pennsylvania State University

2016 - present

*Computer System Lab (CSL)*

PA, US

- Optimizing Video Processing Pipeline in the Mobile SoC.
- Optimizing Sensing Energy Consumption on Internet of Things Platforms.

### Lenovo Networking

Summer 2016

*Mentor: Yuan Li*

Shanghai, China

- Lenovo OpenStack Plugins to Monitor Network Resources in a Stateless Way.

### Shandong University

Summer 2015

*Advisor: Prof. Hongjun Dai*

Jinan, China

- A Head Record Cache Structure to Improve the Operations on Big-Files in Datacenters.

### Inspur Server Group

2014 - 2015

*Advisor: Zhilou Yu*

Jinan, China

- Iscsi Enterprise Target Dual-Controller Server based on Kernel-independent Cache Module.

### Tsinghua University

Summer 2014

*Advisor: Prof. Mingyao Qi*

Shenzhen, China

- A k-Combination First-Fit Solution for Three-dimensional Knapsack Packing Problem (3DKP).

## PUBLICATIONS

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- [C1]. Prasanna Venkatesh Rengasamy, Haibo Zhang, Nachiappan Chidambaram Nachiappan, **Shulin Zhao**, Anand Sivasubramaniam, Mahmut Kandemir, Chita R Das “Characterizing Diverse Handheld Apps for Customized Hardware Acceleration”, *In proceedings of 2017 IEEE International Symposium on Workload Characterization*.  
(IISWC 2017)
- [C2]. Haibo Zhang, Prasanna Venkatesh Rengasamy, **Shulin Zhao**, Nachiappan Chidambaram Nachiappan, Anand Sivasubramaniam, Mahmut T. Kandemir, Ravi Iyer, Chita R. Das “Race-to-sleep + Content Caching + Display Caching: a Recipe for Energy-efficient Video Streaming on Handhelds”, *In proceedings of The 50th Annual IEEE/ACM International Symposium on Microarchitecture*.  
(MICRO 2017)
- [J3]. Hongjun Dai, **Shulin Zhao**, Kang Chen “A Chaos-oriented Prediction and Suppression Model to Enhance the Security for Cyber Physical Power Systems. ”, *Journal of Parallel and Distributed Computing*  
(Parallel Distrib. Comput. 2017)
- [J4]. Lei Liu, **Shulin Zhao**, Zhilou Yu, Hongjun Dai “A Big Data Inspired Chaotic Solution for Fuzzy Feedback Linearization Model in Cyber-physical Systems”, *Ad Hoc Networks*.  
(Ad Hoc Networks 2015)
- [J5]. Hongjun Dai, **Shulin Zhao**, Jiutian Zhang, Meikang Qiu, Lixin Tao “Security Enhancement of Cloud Servers with a Redundancy-based Fault-tolerant Cache Structure”, *Future Generation Computer Systems*.  
(Future Generation Comp. Syst. 2015).
- [C6]. Yuechen Tao, Hongjun Dai, Bingyong Sun, **Shulin Zhao**, Meikang Qiu, Zhilou Yu “A Head Record Cache Structure to Improve the Operations on Big Files in Cloud Storage Servers”, *In Proceedings of 17th IEEE International Conference on High Performance Computing and Communications*.  
(HPCC 2015)
- [J7]. Hongjun Dai, **Shulin Zhao**, Zhiping Jia, Tianzhou Chen “Low-Cost Ultrasonic Distance Sensor Arrays with Networked Error Correction”, *Sensors*.  
(Sensors 2013)

## TECHNICAL STRENGTHS

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<b>Programming</b>	C/C++, Python, Matlab
<b>Tools</b>	Gem5, Multi2Sim, DramSim2, Pin

## REFERENCES

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**Mahmut Taylan Kandemir**  
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**Tel:** (814) 863-4888

**Anand Sivasubramaniam**  
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