

No.6 Kexueyuan South Road, Haidian District,  
Beijing, China  
100190

☎ +86-13681553508

☎ +86-010-62600881

✉ zhangmingzhe@ict.ac.cn

Institute of Computing Technology  
Chinese Academy of Science

# Mingzhe Zhang

*Ph.D candidate*

## Education

- 2004–2008 **Bachelor of Computer Science**, Nanking University of Posts and Telecommunications, Nanking, China.
- 2009–2013 **Master of Computer Science**, Inner Mongolian University, Hohhot, China.
- 2013–Now **Ph.D Candidate of Computer Science**, Institute of Computing Technology, Chinese Academy of Science (ICT,CAS), Beijing, China.

## Experience

Jun.2008–Sep.2009, Engineer, Institute of Software, Chinese Academy of Science (ISCAS)

Jul.2008–  
Dec.2008 **Project Manager**, "Web-based Management System For "Torch Plan" Software Park Around China".

Duty:

Project Management

Design the testing plan

Modify MVC framework for web design based on C#

Dec.2008–  
Sep.2009 **Engineer**, "Network Control System For China Railway High-speed (CRH)".

Duty:

Design and implement the signal translation system for on-board signal analysis based on C and C#

Oct.2010 - Jun.2013, Visiting Student, Institute of Computing Technology, Chinese Academy of Science (ICT,CAS)

Oct.2010–  
Jul.2011 **Project Manager and Developer**, "Simulator for Rad-Hard 32-bit SPARC V8 Processor".

Duty:

Implement of SPARC V8 Instruction Set in SimpleScalar simulator

Modify the simulator for SPARC V8 support

Implement of debug support on simulator

Make test plan

Document Work

Nov.2012–  
Feb.2013 **Architect**, "Many-core Processor for High-throughput Applications (Godson-D)".

Duty:

Design the NoC sub-system

Evaluate the NoC design on simulator

Jan.2013–  
Sep.2013     **Project Manager**, *"Full-system Simulator for ARMv8 Instruction Set"*.  
Duty:  
Project Management  
Develop automatic tool of code generation for ARMv7 Decoding Module based on Python

Nov.2015 - Nov.2016, Visiting PhD student, Department of Computer Science,  
University of Chicago (Supported by China Scholarship Council)

Nov.2010–  
current     , *Write Scheme for MLC PCM lifetime improvment.*

## Languages

English	<b>CET4</b>	512/710
English	<b>CET6</b>	498/710
English	<b>PETS-5/WSK</b>	71/100

## Computer skills

Programming Languages: C/C++, Python, C#, Verilog(few)

Architecture Simulation: SimpleScalar, Graphite, PhoenixSim, GEM5, DRAMsim, Simics

Others: Latex, Matlab

## Honor

- \* 2011 Outstanding Student of State Key Laboratory of Computer Architecture, ICT, CAS
- \* 2012 Outstanding Student of State Key Laboratory of Computer Architecture, ICT, CAS
- \* 2012 Excellent Presentation Award of 2nd Ph.D Forum of Micro-electronic in Beijing
- \* 2014 Outstanding Student of University of Chinese Academy of Sciences

## Self-presentation

- |                   |                                |
|-------------------|--------------------------------|
| o Hard-working??  | o Optimistic                   |
| o Self-confidence | o Ambitious attitude essential |
| o Dedication      | o Dynamic and honest           |

## Publications

- \* Shaoli Liu, Tianshi Chen, Ling Li, Xi Li, **Mingzhe Zhang**, Chao Wang, Haibo Meng, Xuehai Zhou, and Yunji Chen, "FreeRider: Non-local Adaptive Network-on-Chip Routing with Packet-Carried Propagation of Congestion Information", IEEE Transaction on Parallel and Distributed Systems. Vol 26(8) pp. 2272-2285, 2015.
- \* Lunkai Zhang, Dmitri B. Strukov, Hebatallah Saadeldeen, Dongrui Fan, **Mingzhe Zhang**, Diana Franklin, "SpongeDirectory: flexible sparse directories utilizing multi-level memristors". PACT 2014: 61-74

- \* Xiaochun Ye, Dongrui Fan, Ninghui Sun, Shibin Tang, **Mingzhe Zhang**, Hao Zhang, "SimICT: A fast and flexible framework for performance and power evaluation of large-scale architecture". ISLPED 2013: 273-278
- \* Lunkai Zhang, **Mingzhe Zhang**, Lingjun Fan, Da Wang, Paolo Ienne, "Spontaneous Reload Cache: Mimicking a Larger Cache with Minimal Hardware Requirement". NAS 2013: 31-40
- \* Shuai Zhang, Zhiyong Liu, Dongrui Fan, Fenglong Song, **Mingzhe Zhang**, "Energy-Performance Modeling and Optimization of Parallel Computing in On-Chip Networks". TrustCom/ISPA/IUCC 2013: 879-886
- \* **Mingzhe Zhang**, Da Wang, Xiaochun Ye, Liqiang He, Dongrui Fan, Zhiyong Liu, "A Path-Adaptive Opto-electronic Hybrid NoC for Chip Multi-processor". TrustCom/ISPA/IUCC 2013: 1198-1205
- \* **Mingzhe Zhang**, Liqiang He, Dongrui Fan, "Self-Correction Trace Model: A Full-System Simulator for Optical Network-on-Chip". IPDPS Workshops 2012: 242-247