LIJING ZHU

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AFFILIATION

State Key Laboratory of Integrated Service Networks (ISN)
School of Telecommunications Engineering, Xidian University

EDUCATION

Xidian University, Xi'an, Shaanxi, China — September 2017 - Present
Ph.D. in Electronic & Telecommunications Engineering

Xidian University, Xi'an, Shaanxi, China — September 2013 - July 2017
B.S. in Telecommunications Engineering (GPA: 3.8)
Thesis: "Multi-Objective Routing Algorithm for Optical Network-on-Chip **(outstanding thesis)**
Advisor: Huaxi Gu

RESEARCH INTERESTS

- Silicon photonics switching for HPC/Data-center.
- Optical Interconnects for multi-core processor architectures.
- New scalable computing systems, nano-photonic/nano-electronic interconnect.

PUBLICATIONS

· **Lijing Zhu**, Huaxi Gu, Yintang Yang, and Yawen chen, "**Making path selection faster: a routing algorithm for ONoC**," Optics Express, Vol. 29, Issue 7, pp. 10221-10235, 2021.
· Yintang Yang, Ke Chen, Huaxi Gu, Bowen Zhang and **Lijing Zhu**, "**TAONoC: A Regular Passive Optical Network on Chip Architecture Based on Comb Switches**," IEEE Transactions on Very Large Scale Integration Systems, Vol. 27, Issue 4, pp. 954-963, 2019.
· **Lijing Zhu** and Huaxi Gu, "**A Traffic-Balanced and Thermal-Fault Tolerant Routing Algorithm for Optical Network-on-Chip**," 2019 18th International Conference on Optical Communications and Networks (ICOCN), Huangshan, China, pp. 1-3, 2019.
· **Lijing Zhu**, Kun Wang, Duan Zhou, Liangkai Liu, and Huaxi Gu, "**An Optimization Algorithm to Build Low Congestion Multi-Ring Topology for Optical Network-on-Chip**," IEICE Transactions on Information and Systems, Vol. E101.D, Issue 7, pp. 1835-1842, 2018.
· **Lijing Zhu** Zheng Chen and Huaxi Gu, "**A new multicast aware optical Network-on-Chip**," 2016 15th International Conference on Optical Communications and Networks (ICOCN), Hangzhou, China, pp. 1-3, 2016.

P.R.C. PATENT

· Huaxi Gu, Xiaoqi Xu, Xiaoshan Yu, Wenting Wei, **Lijing Zhu**, 'Multi-path routing method for high-speed interconnection dragonfly + network," 2020, No.202010616646.8 (review).
· Huaxi Gu, **Lijing Zhu**, Yintang Yang, Zhangming Zhu, Kun Wang, and Bowen Zhang, 'A method for calculating the path of optical network-on-chip under optical-circuit switching," 2018, No.201711403486.3 (authorized).

· **Lijing Zhu**, Huaxi Gu, Kun Wang, Yintang Yang, Zhangming Zhu, Liangkai Liu. "An optimization algorithm to build topology for optical network-on-chip based on multi-ring," 2017, No.201710247926.4 (authorized).
· Qiankun Liu, Huaxi Gu, Kun Wang, Yintang Yang, **Lijing Zhu**, 'An optical network-on-chip based on five-port optical router," 2016, No.201611137028.5 (authorized).

HONOURS AND AWARDS

· Ph.D Scholarship, Xidian University 2018-2019, 2019-2020, 2020-2021
· Master Scholarship, Xidian University 2017-2018
· Undergraduate First-class Scholarship, Xidian University (Top 14% of 560+) 2015-2016, 2016-2017
· Undergraduate Second-class Scholarship, Xidian University (Top 20% of 560+) 2013-2014, 2014-2015

EXPERIENCE

Xidian University September 2017 - Present
Researcher *Xi'an, China*

· Develop a multi-objective routing for optical circuit-switching based ONoC.
· Use Opnet network simulator to evaluate the multi-objective routing.
· Propose a method to build multi-ring based Optical network-on-chip.
· Use Opnet simulator to evaluate the topology building method.
· Propose a non-blocking Optical network-on-chip for multicast.

University of Otago August 2019 - September 2019
Exchange student *Dunedin, New Zealand*

· Propose a learning-based routing algorithm for ONoC.
· Use Opnet to evaluate the routing .

Huawei October 2019 - December 2019
Intern *Hangzhou, China*

· Research on routing algorithm for high performance computing.
· Use Omnet++ network simulator to evaluate the routing algorithm with infiniband .

REFEREES

My supervisors:
Prof. Huaxi Gu
State Key Laboratory of Integrated Service Networks, Xidian University
Email: hxgu@xidian.edu.cn