Education Rice University, Houston, United States Ph.D., Computer Science, Advised by Prof. T. S. Eugene Ng	08/2019 – Now
Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China M.E., Computer Science, Advised by Prof. Mingyu Chen	09/2014 – 06/2017
Huazhong University of Science and Technology, Wuhan, China B.E., Computer Science	09/2010 - 06/2014

Publication

- 1. **Zhuang Wang**, Ke Liu, Long Li, Weiyi Chen, Mingyu Chen, Lixin Zhang, "A Novel Approach for All-to-All Routing in All-optical Hypersquare Torus Network," in *ACM Computing Frontiers (CF)*, 2016.
- 2. Ke Liu, **Zhuang Wang**, Jack Y. B. Lee, Mingyu Chen, Lixin Zhang, "<u>Adaptive Rate Control over Mobile Data Networks with Heuristic Rate Compensations</u>," in *IEEE/ACM IWQoS*, 2016.
- 3. **Zhuang Wang**, Ke Liu, Yifan Shen, Jack Y. B. Lee, Mingyu Chen, Lixin Zhang, "Intra-host Rate Control with Centralized Approach," in *IEEE Cluster* 2016.

Research Experiences

Rice University 08/2020 – Now

PhD student, advised by Prof. T. S. Eugene Ng

- Accelerate machine learning applications with multicast communication
- Design a rate-based multicast framework for 25/40G network
- Scale multicast to thousands leveraging the tolerance of bounded packet loss rate

PhD student, advised by Prof. Ang Chen

Implemented AES with P4 language

King Abdullah University of Science and Technology

01/2019 - 03/2019

08/2018 - 12/2018

Visiting student, advised by Prof. Marco Canini

• Evaluated the impact of packet loss on machine learning applications

Visiting student, advised by Prof. Theophilus Benson, µBPF [GitHub]

Probed TCP flows and packets information from the kernel with eBPF

- Traced packet transmission across different layers in the kernel
- Measured NIC-to-NIC latencies, the kernel latencies and the application latencies

Institute of Computing Technology, Chinese Academy of Sciences

03/2016 - 04/2017

Graduate student, advised by Prof. Mingyu Chen, Haiyun [GitHub]

- Designed a high-performance flow generator generating one million concurrent TCP flows with one core
- Measured in-server processing delay with DPDK

Awards and Honors

Award	Organization	Date
National Scholarship	Ministry of Education of P. R. China	2011
National Endeavor Scholarship	Ministry of Education of P. R. China	2013
National Scholarship	Ministry of Education of P. R. China	2016
International Postgraduate Research Scholarship	Australian government	2017
Graduate Fellowship	Rice University	2019