Gaoxiong Zeng

Contact Information

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Short Biography

Gaoxiong Zeng (曾高雄) is a Ph.D. student in computer science at Hong Kong University of Science and Technology (HKUST), advised by Prof. Kai Chen. He received his B.E. degree in electronic engineering from University of Science and Technology of China (USTC) in 2015. His research areas of interest include computer networks and systems, with special focuses on data center networking, and transport protocols.

Education

Hong Kong University of Science and Technology (HKUST) — **Hong Kong, China**
Ph.D. in Computer Science and Engineering — *2015 - Present*
Advisor: Prof. Kai Chen

University of Science and Technology of China (USTC) — **Hefei, China**
B.E. in Electronic Engineering and Information Science — *2011 - 2015*

Work Experiences

[Research Intern] Peng Cheng Laboratory, Shenzhen, China. *2019.09 - 2020.01*

[Research Intern] Huawei Technologies Co., Ltd, Hong Kong, China. *2018.11 - 2019.01*

[Research Intern] Chinese Academy of Sciences, Beijing, China. *2014.07 - 2014.08*

Publications

Conference Publications:

- Shuihai Hu, Wei Bai, **Gaoxiong Zeng**, Zilong Wang, Kai Chen, Kun Tan, Yi Wang. Aeolus: A Building Block for Proactive Transport in Datacenters, in Proceedings of the Annual Conference of the ACM Special Interest Group on Data Communication (**SIGCOMM**), Virtual Conference, August 10-14, 2020.
- **Gaoxiong Zeng**, Wei Bai, Ge Chen, Kai Chen, Dongsu Han, Yibo Zhu, Lei Cui. Congestion Control for Cross-Datacenter Networks, in Proceedings of the 27th IEEE International Conference on Network Protocols (**ICNP**), Chicago, USA, October 7-10, 2019.
- Jiacheng Xia, **Gaoxiong Zeng**, Junxue Zhang, Weiyan Wang, Wei Bai, Junchen Jiang, Kai Chen. Rethinking Transport Layer Design for Distributed Machine Learning, in Proceedings of the 3rd ACM Asia-Pacific Workshop on Networking (**APNet**), Beijing, China, August 17-18, 2019.
- **Gaoxiong Zeng**, Wei Bai, Ge Chen, Kai Chen, Dongsu Han, Yibo Zhu. Combining ECN and RTT for Datacenter Transport, in Proceedings of the 1st ACM Asia-Pacific Workshop on Networking (**APNet**), Hong Kong SAR, China, August 3-4, 2017.

Journal Publications:

- **Gaoxiong Zeng**, Shuihai Hu, Junxue Zhang, Kai Chen. Transport Protocols for Data Center Networks: A Survey, in ICT-CAS/CCF Journal of Computer Research and Development (**J-CRAD**), 57(1), 2020.
- Wei Bai, Shuihai Hu, **Gaoxiong Zeng**, Kai Chen. Data Center Flow Scheduling, in Communications of the

China Computer Federation (**CCCF**), 15(4), 2019.

Posters & Demos:

- Shuihai Hu, Kai Chen, **Gaoxiong Zeng**. Improved Path Compression for Explicit Path Control in Production Data Centers, in Poster Session of the 13th USENIX Symposium on Networked Systems Design and Implementation (**NSDI**), Santa Clara, USA, March 16-18, 2016.

Selected Talks

Congestion Control for Cross-Datacenter Networks. ICNP 2019. Chicago, USA. *Oct. 2019*

Combining ECN and RTT for Datacenter Transport. APNet 2017. Hong Kong, China. *Aug. 2017*

Professional Activities

[Reviewer] INFOCOM 2017, etc.

[Review Drafter] NSDI 2021, INFOCOM 2021, CoNEXT 2020, SIGCOMM 2019, NSDI 2019, etc.

Teaching & Tutoring

[Teaching Assistant] HKUST FYP: Transport Design for Data Center Networks *Fall 2019, Spring 2020*

[Teaching Assistant] HKUST COMP2611: Computer Organization *Spring 2016, Fall 2016, Spring 2017*

Honors & Awards

[HKUST] Research Postgraduate Scholarship *2015, 2016, 2017, 2018, 2019, 2020*

[USTC] Graduate with Honors of the Talent Program in Information Science and Technology *2015*

[USTC] Team Lead and 1^{st} Place in Electronics Design Competition of the Talent Program *2014*

[USTC] Outstanding Student Scholarship *2012, 2013, 2014*

[Department of Education, Guangdong] Provincial Soong Ching Ling Scholarship *2010*

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