Gaoxiong Zeng

Contact Information

Email: gaoxiongzeng@qq.com Office 3661 (Lift 31/32), Academic Building Telephone: +852-68713173 Hong Kong University of Science and Technology

Website: https://gaoxiongzeng.github.io Clear Water Bay, Hong Kong SAR, China

Education

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

Research Interests

Computer Networking (with special focus on data center networking, and transport protocols).

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.

Workshop Publications:

- 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, 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), 2020.

Posters & Demos:

o 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] Graduation Award of the Talent Program in Computer & Information Sci. & Tech.

2015

[USTC] 1^{st} Place in the Electronic Design Competition of the Talent Program

2014

[USTC] Outstanding Student Scholarship

2012, 2013, 2014

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

2010

 $Last\ updated\ on\ Oct.\ 2020.$