

# Gaoxiong Zeng

## Contact Information

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Email: gaoxiongzeng@qq.com

Telephone: +852-68713173

Website: <https://gaoxiongzeng.github.io>

Office 3661 (Lift 31/32), Academic Building  
Hong Kong University of Science and Technology  
Clear Water Bay, Hong Kong SAR, China

## Education

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**Hong Kong University of Science and Technology (HKUST)**

*Ph.D. in Computer Science and Engineering*

Advisor: Prof. Kai Chen

**Hong Kong, China**

*2015 - Present*

**University of Science and Technology of China (USTC)**

*B.E. in Electronic Engineering and Information Science*

**Hefei, China**

*2011 - 2015*

## Work Experiences

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[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

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

## Publications

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### 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:

- 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

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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

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[Reviewer] INFOCOM 2017, etc.

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

## Teaching & Tutoring

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[Teaching Assistant] HKUST FYP: Transport Design for Data Center Networks *Fall 2018, Spring 2019*

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

## Honors & Awards

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[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<sup>st</sup> 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*