Gaoxiong Zeng

Contact Information

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Hong Kong University of Science and Technology

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   *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*

Research Interests

I am broadly interested in data center networking, with special focus on transport protocols.

Publications

Conference Publications:

◦ **Aeolus: A Building Block for Proactive Transport in Datacenters**
  Shuihai Hu, Wei Bai, **Gaoxiong Zeng**, Zilong Wang, Kai Chen, Kun Tan, Yi Wang
  The Annual Conference of the ACM Special Interest Group on Data Communication (**SIGCOMM**), 2020.

◦ **Congestion Control for Cross-Datacenter Networks**
  Gaoxiong Zeng, Wei Bai, Ge Chen, Kai Chen, Dongsu Han, Yibo Zhu, Lei Cui
  The 27th IEEE International Conference on Network Protocols (**ICNP**), 2019.

Workshop Publications:

◦ **Rethinking Transport Layer Design for Distributed Machine Learning**
  Jiacheng Xia, **Gaoxiong Zeng**, Junxue Zhang, Weiyan Wang, Wei Bai, Junchen Jiang, Kai Chen
  The 3rd ACM Asia-Pacific Workshop on Networking (**APNet**), 2019.

◦ **Combining ECN and RTT for Datacenter Transport**
  Gaoxiong Zeng, Wei Bai, Ge Chen, Kai Chen, Dongsu Han, Yibo Zhu
  The 1st ACM Asia-Pacific Workshop on Networking (**APNet**), 2017.

Journal Publications:

◦ **Transport Protocols for Data Center Networks: A Survey**
  Gaoxiong Zeng, Shuihai Hu, Junxue Zhang, Kai Chen
  Journal of Computer Research and Development (**J-CRAD**), 2020.

Posters & Demos:

○ **Improved Path Compression for Explicit Path Control in Production Data Centers**
Shuihai Hu, Kai Chen, **Gaoxiong Zeng**
The 13th USENIX Symposium on Networked Systems Design and Implementation (**NSDI**), 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*

Teaching Experiences

[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] 1st 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*