

Jinbin Hu | Curriculum Vitae

Department of CSE, Hong Kong University of Science and Technology
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I am currently a Post-doctoral from Department of Computer Science and Engineering, Hong Kong University of Science and Technology, Hong Kong SAR, advised by Prof. Kai Chen. My current research centers on transport protocols and load balancing for large-scale datacenter networks, RDMA networking, learning-based network systems, privacy-preserving computing, and programmable switching architectures*.

Education

- **PostDoc, Dept. of CSE, HKUST** **Hong Kong SAR**
Computer Science and Engineering 1.2022–
Advisor: Prof. Kai Chen.
- **Ph.D., School of Computer Science & Engineering, Central South University** **Changsha, China**
Computer Science and Technology 9.2016–12.2020
Advisor: Prof. Jiawei Huang.
- **M.S., School of Electronic & Information Engineering, Beijing Jiaotong University** **Beijing, China**
Microelectronics and Solid State Electronics 9.2008–1.2011
Advisor: Prof. Xiaoguang Li.
- **B.S., School of Electronic & Information Engineering, Beijing Jiaotong University** **Beijing, China**
Electronic Science and Technology 9.2004–7.2008

Experiences

- **Changsha University of Science & Technology** **Changsha, China**
Lecturer 12.2021–
Teaching and researching in School of Computer and Communication Engineering.
- **Hunan Mechanical & Electrical Polytechnic** **Changsha, China**
Engineer 8.2014–12.2021
Teaching and researching in School of Electrical Engineering.
- **National University of Defense Technology** **Changsha, China**
FPGA Verification Engineer 8.2013–8.2014
Responsible for FPGA verification of multi-core CPU in Microelectronics Institute.
- **Empyrean Technology Co., Ltd** **Beijing, China**
IC Software Test Engineer 1.2011–8.2013
Responsible for IC simulation software testing.

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Publications

1. **Load Balancing in PFC-Enabled Datacenter Networks**
Jinbin Hu, Chaoliang Zeng, Zilong Wang, Hong Xu, Jiawei Huang, Kai Chen. 7.2022
In Proc. ACM APNet, 2022.
2. **RPO: Receiver-driven Transport Protocol Using Opportunistic Transmission in Data Center**
Jinbin Hu, Jiawei Huang, Zhaoyi Li, Yijun Li, Wenchao Jiang, Kai Chen, Jianxin Wang and Tian He. 11.2021
In Proc. IEEE ICNP, 2021. (CCF B)
3. **Adjusting Switching Granularity of Load Balancing for Heterogeneous Datacenter Traffic**
Jinbin Hu, Jiawei Huang, Wenjun Lv, Weihe Li, Zhaoyi Li, Wenchao Jiang, Jianxin Wang and Tian He.* 6.2021
IEEE/ACM Transactions on Networking, 2021, 29(5): 2367-2384. (CCF A)
4. **AMRT: Anti-ECN Marking to Improve Utilization of Receiver-driven Transmission in Data Center**
Jinbin Hu, Jiawei Huang, Zhaoyi Li, Jianxin Wang and Tian He. 8.2020
In Proc. ACM ICPP, 2020. (CCF B)
5. **CAPS: Coding-based Adaptive Packet Spraying to Reduce Flow Completion Time in Data Center**
Jinbin Hu, Jiawei Huang, Wenjun Lv, Yutao Zhou, Jianxin Wang and Tian He.* 10.2019
IEEE/ACM Transactions on Networking, 2019, 27(6): 2338-2353. (CCF A)
6. **TLB: Traffic-aware Load Balancing with Adaptive Granularity in Data Center Networks**
Jinbin Hu, Jiawei Huang, Wenjun Lv, Weihe Li, Jianxin Wang and Tian He. 8.2019
In Proc. ACM ICPP, 2019. (CCF B)
7. **CAPS: Coding-based Adaptive Packet Spraying to Reduce Flow Completion Time in Data Center**
Jinbin Hu, Jiawei Huang, Wenjun Lv, Yutao Zhou, Jianxin Wang and Tian He. 4.2018
In Proc. IEEE INFOCOM, 2018. (CCF A)
8. **Coding-Based Distributed Congestion-Aware Packet Spraying to Avoid Reordering in Data Center Networks**
Jinbin Hu, Chang Ruan, Lei Wang, Osama Alfarraj, Amr Tolba.* 3.2021
IEEE Access, 2021, 9: 35539-35548.
9. **Survey on traffic management in data center network: from link layer to application layer**
Weihe Li, Jingling Liu, Shiqi Wang, Tao Zhang, Shaojun Zou, Jinbin Hu, Wanchun Jiang, Jiawei Huang.* 3.2021
IEEE Access, 2021, 9: 38427-38456.
10. **Motion Prediction Based TDMA Protocol in VANETs**
Jinbin Hu, Wenjun Lyu, Shaohua Zhong and Jiawei Huang.* 3.2021
Electronics, 2020, 9(11), 1792.

(* stands for Corresponding author.)

Research Project

- **The National Natural Science Foundation of China**
Study on Transport Control in Data Center Lossless Network Based on Priority-based Flow Control, 2022.1.1-2024.12.31. (PI)
- **The Natural Science Foundation of Hunan Province**
Study on Communication Optimization Technology for Distributed Deep Neural Network, 2022.1.1-2024.12.31. (PI)