

# Yipei Niu

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## Education

- Doctor of Philosophy (Ph.D.) candidate in Computer Science  
Huazhong University of Science and Technology, China 2016–Present  
Adviser: Professor Fangming Liu  
Research interests: Hybrid Cloud, OpenStack, FPGA
- Master of Engineer (M. Engr.) in Computer Science  
Huazhong University of Science and Technology, China 2014–2016  
Thesis: Load Balancing for Internet Applications in Hybrid Cloud  
Adviser: Professor Fangming Liu  
Research interests: Hybrid Cloud, Queueing Theory, Online Algorithm
- Bachelor of Engineer (B. Engr.) in Computer Science  
Henan University, Kaifeng, Henan, China 2009–2013

## Publications

### CONFERENCE ARTICLES

1. **Yipei Niu**, Fangming Liu, Zongpeng Li, “Load Balancing across Microservices”, in *Proc. of IEEE INFOCOM* (CCF A-rank), Honolulu, Hawaii, USA, April, 2018.
2. **Yipei Niu**, Fangming Liu, Xincan Fei, and Bo Li, “Handling Flash Deals with Soft Guarantee in Hybrid Cloud”, in *Proc. of IEEE INFOCOM* (CCF A-rank), Atlanta, Georgia, USA, May, 2017.
3. **Yipei Niu**, Bin Luo, Fangming Liu, Jiangchuan Liu, and Bo Li, “When Hybrid Cloud Meets Flash Crowd: Towards Cost-Effective Service Provisioning”, in *Proc. of IEEE INFOCOM* (CCF A-rank), Hong Kong, China, April, 2015.
4. Bin Luo, **Yipei Niu**, and Fangming Liu, “Cost-effective service provisioning for hybrid cloud applications”, in *Proc. of EAI CollaborateCom* (CCF C-rank), Wuhan, China, November, 2015.
5. Panpan Jin, Jian Guo, Yikai Xiao, Rong Shi, **Yipei Niu**, Fangming Liu, Chen Qian, Yang Wang, “Postman: Rapidly Mitigating Bursty Traffic by Offloading Packet Processing”, in *Proc. of USENIX ATC* (CCF A-rank), Renton, WA, USA, July, 2019.

### JOURNAL ARTICLES

1. Fangming Liu, Bin Luo, **Yipei Niu**, “Cost-Effective Service Provisioning for Hybrid Cloud Applications”, in *proc. of ACM/Springer Journal on Mobile Networks and Applications (MONET)* (CCF

C-rank), April 2017, Volume 22, Issue 2, pp 153-160.

2. Xiuxiu Wang, **Yipei Niu**, Fangming Liu, and Zichen Xu, "When FPGA Meets Cloud: A First Look at Performance", *to appear in IEEE Transactions on Cloud Computing* (CCF C-rank), 2020.

## Software

1. Tricircle: A system for networking automation across Neutron  
OpenStack Big-tent project  
Features: Dynamic pod binding (Ocata), Load-Balancing-as-a-Service (Queens), L3 networking model (Stein). 2016–Present

## Teaching

1. Teaching Assistant | Huazhong University of Science and Technology, China  
IoT1401: Introduction to Internet of Things Fall 2014

## Awards

- |                      |           |
|----------------------|-----------|
| National Scholarship | 2016–2017 |
| Zhixing Scholarship  | 2016–2017 |