PROCEEDINGS

TONGJI-YALE
NETWORKING SYSTEMS GROUP

TONGJI CONTRIBUTIONS

2016 – 2019

Jiading, Shanghai, China

New Haven, Connecticut, USA

Last update: Oct. 12, 2019

Table of Contents

Tongji First Papers

Qiao Xiang (Tongji, Yale), J. Jensen Zhang (Tongji, Yale), X. Tony Wang (Tongji, Yale), Y. Jace Liu (Tongji), Chin Guok (LBNL), Franck Le (IBM), John MacAuley (LBNL), Harvey Newman (California Institute of Technology), Y. Richard Yang (Tongji, Yale)
In Proceedings of the ACM SIGCOMM 2018 Conference on Posters and Demos.

Official Link: https://dl.acm.org/citation.cfm?id=3234208
Note: SIGCOMM is a flagship conference of computer networking

JMS: Joint Bandwidth Allocation and FlowAssignment for Transfers with Multiple Sources 45
Geng Li (Tongji, Yale), Yichen Qian (Tongji), Lili Liu (Tsinghua), Y. Richard Yang (Tongji, Yale)
In Proceedings of the third International Conference on Data Science in Cyberspace (DSC) 2018.

Official Link: https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8411847

Unicorn: Unified Resource Orchestrationfor Multi-Domain, Geo-Distributed Data Analytics 53
Qiao Xiang (Tongji, Yale), Shenshen Chen (Tongji), Kai Gao (Tsinghua, Yale), Harvey Newman (California Institute of Technology), Ian Taylor (Cardiff, University of Notre Dame), Jingxuan Zhang (Tongji), Y. Richard Yang (Tongji, Yale)
In Proceedings of the Smart Computing Workshop on Distributed Analytics InfraStructure and Algorithms for Multi-Organization Federations (DAIS) 2018.

Official Link: https://dais-ita.org/sites/default/files/IEEE-SWC-DAIS-18.pdf

DDP: Distributed Network Updates in SDN 59
Geng Li (Tongji, Yale), Yichen Qian (Tongji), Chenxingyu Zhao (Peking), Y. Richard Yang (Tongji, Yale), Tong Yang (Peking)
In Proceedings of the third eighth International Conference on Distributed Computing Systems (ICDCS) 2018.

Official Link: https://ieeexplore.ieee.org/document/8416414
Note: ICDCS is a top conference of distributed computing

Unicorn: Unified Resource Orchestration for Multi-Domain, Geo-Distributed Data Analytics ... 65
Qiao Xiang (Tongji, Yale), X. Tony Wang (Tongji, Yale), J. Jensen Zhang (Tongji), Harvey Newman (California Institute of Technology), Y. Richard Yang (Tongji, Yale), Y. Jace Liu (Tongji)
In Proceedings of the forth workshop on Innovating the Network for Data-Intensive Science (INDIS) 2017.

Official Link: https://scinet.supercomputing.org/workshop/sites/default/files/Xiang-Unicorn_0.pdf

Game-Theoretic User Association in Ultra-dense Networks with Device-to-Device Relays 76
Geng Li (Tongji, Yale), Yuping Zhao (Peking), Dou Li (Peking)
Wireless Personal Communications: An International Journal 95 (2017) 2691-2708.

Official Link: https://dl.acm.org/citation.cfm?id=3134961

Auc2Reserve: A Differentially Private Auction for Electric Vehicle Fast Charging Reservation 94
Qiao Xiang (Tongji, Yale), Linghe Kong (McGill, Shanghai Jiaotong), Xue Liu (McGill), Jingdong Xu (Nankai), Wei Wang (Tongji)
In Proceedings of the twenty second International Conference on Embedded and Real-Time Computing Systems and Applications (RTSA) 2016.

Official Link: https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7579930

Tongji Collaboration Papers

Update Algebra: Toward Continuous, Non-Blocking Composition of Network Updates in SDN 104
Geng Li (Yale, Tongji), Y. Richard Yang (Yale), Franck Le (IBM), Yeon-sup Lim (IBM), Junqi Wang (Rutgers)
In Proceedings of the IEEE International Conference on Computer Communications (INFOCOM) 2019.

Official Link: https://ieeexplore.ieee.org/document/8737618
Note: INFOCOM is a flagship conference of computer networking

On Max-min Fair Allocation for Multi-source Transmission 113
Geng Li (Yale, Tongji), Yichen Qian (Tongji), Y. Richard Yang (Yale)
ACM SIGCOMM Computer Communication Review 48 (2018) 2—8.

Official Link: https://ccronline.sigcomm.org/wp-content/uploads/2019/02/sigcomm-ccr-final199.pdf

An Objective-Driven On-Demand Network Abstraction for Adaptive Applications 120
Kai Gao (Tsinghua), Qiao Xiang (Tongji, Yale), Xin Wang (Tongji, Yale), Yang Richard Yang (Yale), Jun Bi (Tsinghua)
IEEE/ACM Transactions on Networking 27 (2019) 805—818

Official Link: https://ieeexplore.ieee.org/document/8674832

Precedence: Enabling Compact Program Layout By Table Dependency Resolution 134
Christopher Leet (Yale), Shenshen Chen (Yale, Tongji), Kai Gao (Sichuan), Y. Richard Yang (Yale, Tongji)
In Proceedings of the ACM Symposium on SDN Research (SOSR) 2019.

Official Link: https://dl.acm.org/citation.cfm?id=3314148.3314348

IEEE Communications Magazine 54.10 (2016) 53-59.

Official Link: https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7588229

Magellan: Generating Multi-Table Datapath from Datapath Oblivious Algorithmic SDN Policies 198
Andreas Voellmy (Yale), Shenshen Chen (Tongji), Xin Wang (Tongji), Y. Richard Yang (Yale)
In Proceedings of the ACM SIGCOMM 2016 Conference on Posters and Demos.

Official Link: https://dl.acm.org/citation.cfm?id=2959064

FAST: A Simple Programming Abstraction for Complex State-Dependent SDN Programming 200
Kai Gao (Tsinghua), Chen Gu (Tongji), Qiao Xiang (Tongji, Yale), Y. Richard Yang (Tongji, Yale), Jun Bi (Tsinghua)
In Proceedings of the ACM SIGCOMM 2016 Conference on Posters and Demos.

Official Link: https://dl.acm.org/citation.cfm?id=2960424

ORSAP: Abstracting routing state on demand 202
Kai Gao (Tsinghua), Chen Gu (Tongji), Qiao Xiang (Tongji, Yale), Xin Wang (Tongji), Y. Richard Yang (Tongji, Yale), Jun Bi (Tsinghua)
In Proceedings of the twenty forth International Conference on Network Protocols (ICNP) 2016 on Poster.

Official Link: https://ieeexplore.ieee.org/document/7784454

Internet Standards

ALTO Extension: Path Vector 204
Kai Gao (Sichuan), Young Lee (Huawei), Sabine Randriamasy (Nokia Bell Labs), Y. Richard Yang (Yale), Jingxuan Zhang (Tongji)
IETF Internet Proposed Standard 2019.

Official Link: https://tools.ietf.org/html/draft-ietf-alto-path-vector-08

Unified Properties for the ALTO Protocol 239
Wendy Roome (Nokia Bell Labs), Sabine Randriamasy (Nokia Bell Labs), Y. Richard Yang (Yale), Jingxuan Zhang (Tongji), Kai Gao (Sichuan)
IETF Internet Proposed Standard 2019.

Official Link: https://tools.ietf.org/html/draft-ietf-alto-unified-props-new-09

Content Delivery Network Interconnection (CDNI) Request Routing: CDNI Footprint and Capabilities Advertisement using ALTO 282
Jan Seedorf (HFT Stuttgart), Y. Richard Yang (Tongji, Yale), Kevin J. Ma (Ericsson), Jon Peterson (NeuStar), Xiao Lin (Tongji), Jingxuan Zhang (Tongji)
IETF Internet Proposed Standard 2019.

Official Link: https://tools.ietf.org/html/draft-ietf-alto-cdni-request-routing-alto-07