JUNXIAO WANG

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EXPERIENCE

2021–now Postdoctoral Fellow

HK Polytechnic University

Department of Computing (COMP)
Project: Federated Learning over Mobile Edge Networks, aiming at machine learning governance and privacy-preserving deep learning frameworks.
PolyU Edge Intelligence Laboratory directed by Prof. Song Guo

2018–2019 Visiting Researcher

Queen Mary University, London

School of Electronic Engineering and Computer Science (EECS)
Project: Network Enhancement with Software Defined Networking and Network Function Virtualization, developing novel and efficient architectures, algorithms and systems to guarantee datacenter in-network's performance.
Networks Research Group directed by Prof. Steve Uhlig

EDUCATION

2016–2020 PhD, Computer Technology Application

Dalian University of Technology

College of Computer Science and Technology
Thesis: Research on Techniques of Performance Guarantee for Software Defined Network Function Virtualization System
Advisor: Prof. Keqiu Li

2014–2017 MEng, Computer Systems Organization

Dalian University of Technology

College of Computer Science and Technology
Thesis: Research on Request Dispatching for Multi-Controllers in Software-Defined Networking
Advisor: Prof. Keqiu Li

2010–2014 BE, Software Engineering

Dalian Maritime University

College of Information Science and Technology
Graduating With Honors and Exam-exempted Postgraduate

PROFESSIONAL ACTIVITIES

2014.9-now Reviewer for IEEE INFOCOM, IEEE TII, IEEE IoTJ, IEEE TNSM, etc.

2020.10 PC Member for IEEE ICPADS Workshop on NCDM.

2019.12 Session Chair for IEEE ICPADS.

PUBLICATIONS

Preprint Papers

Junxiao Wang, Song Guo, Xin Xie, Heng Qi. "Federated Unlearning via Class-Discriminative Pruning". arXiv:2110.11794, 2021.

Conference Papers

Junxiao Wang, Song Guo, Xin Xie, Heng Qi. "Protect Privacy from Gradient Leakage Attack in Federated Learning". IEEE International Conference on Computer Communications (INFOCOM) 2022.

Keyan Zhao, **Junxiao Wang**, Heng Qi, Xin Xie, Keqiu Li. "HBL-Sketch: A New Three-tier Sketch for Accurate Network Measurement". International Conference on Algorithms and Architectures for Parallel Processing 2019.

Wanqian Zhang, **Junxiao Wang**, Sheng Chen, Heng Qi, Keqiu Li. "A Framework for Resource-aware Online Traffic Classification Using CNN". International Conference on Future Internet Technologies 2019.

Wenrui Zhou, Yuan Cao, Heng Qi, **Junxiao Wang**. "An Effective Network Intrusion Detection Framework Based on Learning to Hash". IEEE International Conference on Smart Internet of Things 2019.

Junxiao Wang, Yuchen Huang, Heng Qi, Keqiu Li, Steve Uhlig. "CLICK-UP: Towards Software Upgrades of Click-driven Stateful Network Element". ACM SIGCOMM Conference 2018, Demo track.

Journal Papers

Junxiao Wang, Heng Qi, Wenxin Li, Keqiu Li, Steve Uhlig, Yuxin Wang. "Dynamic SDN Control Plane Request Assignment in NFV Datacenters". IEEE Transactions on Network Science and Engineering.

Heng Qi, **Junxiao Wang**, Wenxin Li, Yuxin Wang, Tie Qiu. "A Blockchain-driven IIoT Traffic Classification Service for Edge Computing". IEEE Internet of Things Journal.

Junxiao Wang, Heng Qi, Keqiu Li, Steve Uhlig. "Click-UP: Towards the Software Upgrade of Click based Modular Network Function". IEEE Systems Journal.

Xinping Xu, Wenxin Li, Heng Qi, **Junxiao Wang**, Keqiu Li. "Latency-Constrained Cost-Minimized Request Allocation for Geo-distributed Cloud Services". IEEE Open Journal of the Communications Society.

Junxiao Wang, Heng Qi, Yang He, Wenxin Li, Keqiu Li. "FlowTracer: An Effective Flow Trajectory Detection Solution Based on Probabilistic Packet Tagging in SDN-Enabled Networks". IEEE Transactions on Network and Service Management.

Junxiao Wang, Heng Qi, Keqiu Li, Xiaobo Zhou. "PRSFC-IoT: A Performance and Resource Aware Orchestration System of Service Function Chaining for Internet of Things". IEEE Internet of Things Journal.