Jiadong Zhang

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EDUCATION

Jilin University, Changchun, Jilin, China

Sep. 2018 - present

Successive master-doctor program

Major: Information and Communication Engineering

Advisor: Professor Wenxiao Shi

Jilin University, Changchun, Jilin, China

Sep. 2014 - Jun. 2018

Bachelor of Engineering

Major: Communication Engineering

GPA: 3.47/4.0

RESEARCH EXPERIENCE

Computation Offloading; Multi-access Edge Computing; Deep Reinforcement Learning

- Proposed the share-based edge computing paradigm with mobile-to-server and mobile-to-wired computation offloading methods. Offloaded tasks from mobile devices can be computed on wired devices on which the unexploited resources are shared and utilized.
- Investigated the deep reinforcement learning-based computation offloading and shunting scheme in the wireless wireline internetwork. By sensing the states of the internetwork, the proposed scheme can adaptively adjust the shunting ratio as well as intelligently and jointly utilize the computing resources of edge servers and wired devices.

PUBLICATIONS & PROCEEDINGS

- J. Zhang, W. Shi, R. Zhang, and W. Liu, "Computation Offloading and Shunting Scheme in Wireless Wireline Internetwork," Manuscript submitted for publication, 2020.
- W. Shi, **J. Zhang**, and R. Zhang, "Share-Based Edge Computing Paradigm With Mobile-to-Wired Offloading Computing," *IEEE Communications Letters*, vol. 23, no. 11, pp. 1953-1957, Nov. 2019.
- W. Shi, **J. Zhang**, and R. Zhang, "An Area-based Offloading Policy for Computing Offloading in MEC-assisted Wireless Mesh Network," in Proc. of IEEE/CIC International Conference on Communications in China (ICCC), Changchun, China, Aug. 2019.
- R. Zhang, W. Shi, **J. Zhang**, and W. Liu, "An Auction Scheme for Computing Resource Allocation in D2D-assisted Mobile Edge Computing," in Proc. of IEEE Global Communications Conference (GLOBECOM), Waikoloa, HI, USA, Dec. 2019.
- W. Shi, S. Liu, **J. Zhang**, and R. Zhang, "A Location-aware Computation Offloading Policy for MEC-assisted Wireless Mesh Network," in Proc. of IEEE/CIC International Conference on Communications Workshops in China (ICCC Workshops), Chongqing, China, Aug. 2020.
- W. Shi, R. Zhang, **J. Zhang**, and M. Ouyang, "Connectivity-based Delay Analysis in MEC-enhanced Vehicular Ad Hoc Networks," in Proc. of IEEE International Conference on Computer and Communication Engineering Technology (CCET), Beijing, China, Aug. 2019.

- W. Shi, L. Zhai, M. Ouyang, and **J. Zhang**, "A Mobile Edge Computing Server Deployment Scheme in Wireless Mesh Network," in Proc. of IEEE/CIC International Conference on Communications Workshops in China (ICCC Workshops), Changchun, China, Aug. 2019.
- Y. Zhao, W. Shi, H. Shi, W. Liu, Z. Wang, and **J. Zhang**, "Resource Allocation for Hybrid RF/FSO Multi-Channel Multi-Radio Wireless Mesh Networks," *IEEE Access*, vol. 8, pp. 9358-9370, 2020.

PATENTS

- W. Shi, **J. Zhang**, R. Zhang, and M. Ouyang. MEC-based Mobile Edge Pre-computing Method. CN, 201810766890.5.
- W. Shi, R. Zhang, J. Zhang, M. Ouyang, and W. Liu. A Mobile Edge Computing Resource Allocation Method Based on Incentive Mechanism. CN, 201910139645.6.
- W. Shi, H. Yuan, M. Ouyang, R. Zhang, and **J. Zhang**. Multicast Routing Channel Allocation Method in Wireless Mesh Network Considering Interference Power. CN, 201910348124.1

AWARDS

• Huawei Scholarship for Postgraduate Student Dec. 2019

• Outstanding Postgraduate Scholarship of Jilin University Sep. 2019

• Academic Postgraduate Scholarship of Jilin University 2018, 2019, 2020

• Academic Undergraduate Scholarship of Jilin University 2014,2015,2016,2017

PERSONAL SKILLS

• Language: English (CET4 473, CET6 443), Madarin Chinese

• Programming: Python, Matlab, C++

• Applications: LATEX, Git (Github, Sourcetree), Microsoft (VScode, Word, Visio, Excel, Powerpoint), Adobe (Acrobat, Photoshop, Illustrator, Premiere)