

Conference Papers

- [1] Bangwen Deng, **Wenfei Wu***, and Linhai Song. “**Redundant Logic Elimination in Network Functions**”. In: *Proceedings of the 2020 Symposium on SDN Research*. SOSR '20. 2020.
- [2] Yongheng Chen, Linhai Song, Xinyu Xing, Fengyuan Xu, and **Wenfei Wu**. “**Automated Finite State Machine Extraction**”. In: *Proceedings of the 2019 Workshop on Forming an Ecosystem Around Software Transformation*. FEAST '19. 2019.
- [3] Yimin Jiang, Yong Cui, **Wenfei Wu**, Zhe Xu, Jiahao Gu, K. K. Ramakrishnan, Yongchao He, and Xuehai Qian. “**SpeedyBox: Low-Latency NFV Service Chains with Cross-NF Runtime Consolidation**”. In: *Proceedings of the 39th IEEE International Conference on Distributed Computing Systems*. ICDCS '19. 2019.
- [4] Junfeng Li, Dan Li, **Wenfei Wu**, K. K. Ramakrishnan, Jinkun Geng, Fei Gui, Fanzhao Wang, and Kai Zheng. “**Sphinx: A Transport Protocol for High-Speed and Lossy Mobile Networks**”. In: *Proceedings of the 38th IEEE International Performance Computing and Communications Conference*. IPCCC '19. 2019.
- [5] Soo-Jin Moon, Jeffrey Helt, Yifei Yuan, Yves Bieri, Sujata Banerjee, Vyas Sekar, **Wenfei Wu**, Mihalis Yannakakis, and Ying Zhang. “**Alembic: Automated Model Inference for Stateful Network Functions**”. In: *Proceedings of the 16th USENIX Symposium on Networked Systems Design and Implementation*. NSDI '19. 2019.
- [6] Qi-An Fu and **Wenfei Wu***. “**TUS: A Transactional Update Service for SDN Applications**”. In: *Proceedings of the 9th ACM SIGOPS Asia-Pacific Workshop on Systems*. APSys '18. 2018.
- [7] Qingmei Ren, Yong Cui, **Wenfei Wu**, Changfeng Chen, Yuchi Chen, Jiangchuan Liu, and Hongyi Huang. “**Improving Quality of Experience for Mobile Broadcasters in Personalized Live Video Streaming**”. In: *2018 IEEE/ACM 26th International Symposium on Quality of Service*. IWQoS '18. 2018.
- [8] Ye Yu, Ying Zhang, **Wenfei Wu**, and Chen Qian. “**NetCP: Consistent, Non-interruptive and Efficient Checkpointing and Rollback of SDN**”. In: *2018 IEEE/ACM 26th International Symposium on Quality of Service*. IWQoS '18. 2018.
- [9] Anubhavnidhi Abhashkumar, Joon-Myung Kang, Sujata Banerjee, Aditya Akella, Ying Zhang, and **Wenfei Wu**. “**Supporting Diverse Dynamic Intent-based Policies using Janus**”. In: *Proceedings of the 13th ACM International Conference on emerging Networking Experiments and Technologies*. CoNEXT '17. Google Scholar Citation 16. 2017.
- [10] Anubhavnidhi Abhashkumar, Jeongkeun Lee, Jean Tourrilhes, Sujata Banerjee, **Wenfei Wu**, Joon-Myung Kang, and Aditya Akella. “**P5: Policy-driven optimization of P4 pipeline**”. In: *Proceedings of the 2017 Symposium on SDN Research*. SOSR '17. 2017.
- [11] Keqiang He, Weite Qin, Qiwei Zhang, **Wenfei Wu**, Junjie Yang, Tian Pan, Chengchen Hu, Jiao Zhang, Brent Stephens, Aditya Akella, and Ying Zhang. “**Low Latency Software Rate Limiters for Cloud Networks**”. In: *Proceedings of the 2017 Asia-Pacific Workshop on Networking*. APNet '17. 2017.
- [12] Ying Zhang, **Wenfei Wu**, Sujata Banerjee, Joon-Myung Kang, and Mario A Sanchez. “**SLA-Verifier: Stateful and Quantitative Verification for Service Chaining**”. In: *Proceedings of the 2017 IEEE Conference on Computer Communications*. INFOCOM '17. 2017.
- [13] Linhai Song, Heqing Huang, Wu Zhou, **Wenfei Wu**, and Yiyang Zhang. “**Learning from Big Malwares**”. In: *Proceedings of the 7th ACM SIGOPS Asia-Pacific Workshop on Systems*. APSys '16. 2016.
- [14] **Wenfei Wu**, Ying Zhang, and Sujata Banerjee. “**Automatic Synthesis of NF Models by Program Analysis**”. In: *Proceedings of the 15th ACM Workshop on Hot Topics in Networks*. HotNets '16. Google Scholar Citation 26. 2016.

- [15] Aaron Gember-Jacobson, **Wenfei Wu**, Xiujun Li, Aditya Akella, and Ratul Mahajan. “**Management plane analytics**”. In: *Proceedings of the 2015 ACM Conference on Internet Measurement Conference*. IMC ’15. Google Scholar Citation 14. 2015.
- [16] **Wenfei Wu**, Keqiang He, and Aditya Akella. “**Perfsight: Performance diagnosis for software dataplanes**”. In: *Proceedings of the 2015 ACM Conference on Internet Measurement Conference*. IMC ’15. Google Scholar Citation 27. 2015.
- [17] Mehrdad Moradi, **Wenfei Wu**, Li Erran Li, and Zhuoqing Morley Mao. “**SoftMoW: recursive and reconfigurable cellular WAN architecture**”. In: *Proceedings of the 10th ACM International Conference on emerging Networking Experiments and Technologies*. CoNEXT ’14. Google Scholar Citation 57. 2014.
- [18] **Wenfei Wu**, Li Erran Li, Aurojit Panda, and Scott Shenker. “**PRAN: Programmable radio access networks**”. In: *Proceedings of the 13th ACM Workshop on Hot Topics in Networks*. HotNets ’14. Google Scholar Citation 27. 2014.
- [19] **Wenfei Wu**, Yizheng Chen, Ramakrishnan Durairajan, Dongchan Kim, Ashok Anand, and Aditya Akella. “**Adaptive data transmission in the cloud**”. In: *2013 IEEE/ACM 21st International Symposium on Quality of Service*. IWQoS ’13. 2013.
- [20] **Wenfei Wu**, Guohui Wang, Aditya Akella, and Anees Shaikh. “**Virtual network diagnosis as a service**”. In: *Proceedings of the 4th annual Symposium on Cloud Computing*. SoCC ’13. Google Scholar Citation 31. 2013.
- [21] Dongsu Han, Ashok Anand, Fahad Dogar, Boyan Li, Hyeontaek Lim, Michel Machado, Arvind Mukundan, **Wenfei Wu**, Aditya Akella, David G. Andersen, John W. Byers, Srinivasan Seshan, and Peter Steenkiste. “**XIA: Efficient Support for Evolvable Internetworking**”. In: *Proceedings of the 9th USENIX Symposium on Networked Systems Design and Implementation*. NSDI ’12. Google Scholar Citation 190. 2012.
- [22] Ashok Anand, Fahad Dogar, Dongsu Han, Boyan Li, Hyeontaek Lim, Michel Machado, **Wenfei Wu**, Aditya Akella, David G Andersen, John W Byers, et al. “**XIA: An architecture for an evolvable and trustworthy Internet**”. In: *Proceedings of the 10th ACM Workshop on Hot Topics in Networks*. HotNets ’11. 2011.
- [23] Kai Chen, Chuanxiong Guo, Haitao Wu, Jing Yuan, Zhenqian Feng, Yan Chen, Songwu Lu, and **Wenfei Wu**. “**Generic and Automatic Address Configuration for Data Center Networks**”. In: *Proceedings of the ACM SIGCOMM 2010 Conference*. SIGCOMM ’10. Google Scholar Citation 70. 2010.
- [24] Chuanxiong Guo, Guohan Lu, Helen J. Wang, Shuang Yang, Chao Kong, Peng Sun, **Wenfei Wu**, and Yongguang Zhang. “**SecondNet: A Data Center Network Virtualization Architecture with Bandwidth Guarantees**”. In: *Proceedings of the 6th International Conference on emerging Networking Experiments and Technologies (CoNEXT)*. CoNEXT ’10. Google Scholar Citation 699. 2010.

Journal Papers

- [1] **Wenfei Wu** and Ying Zhang. “**Network Function Modeling and Its Applications**”. In: *IEEE Internet Computing* (2017).
- [2] Kai Chen, Chuanxiong Guo, Haitao Wu, Jing Yuan, Zhenqian Feng, Yan Chen, Songwu Lu, and **Wenfei Wu**. “**DAC: generic and automatic address configuration for data center networks**”. In: *IEEE/ACM Transactions on Networking* (2012). Google Scholar Citation 32.

Patents

- [1] **Wenfei Wu**, Yongchao He, Xuemin Wen, and Haifeng Li. “**Design and Implementation of Rate Limiters on Programmable Switches**”. In: (2019). Chinese Patent Application.
- [2] Joon Myung Kang, Anubhavnidhi Abhashkumar, Sujata Banerjee, Ying Zhang, and **Wenfei Wu**. “**Generating composite network policy**”. In: (2018). US Patent Application US20180316576A1.
- [3] **Wenfei Wu**, Hongyi Huang, Yongchao He, and Bangwen Deng. “**A Compiler for Network Functions**”. In: (2018). Chinese Patent Application.
- [4] **Wenfei Wu**, Hongyi Huang, Yongchao He, and Bangwen Deng. “**A Development Framework of Network Functions**”. In: (2018). Chinese Patent Application.
- [5] **Wenfei Wu**, Ying Zhang, and Sujata Banerjee. “**Middlebox modeling**”. In: (2018). US Patent Application US20180131621A1.
- [6] Ying Zhang, **Wenfei Wu**, and Sujata Banerjee. “**Selectively monitoring a network of network function chains based on probability of service level agreement violation**”. In: (2018). US Patent 10491528.

Posters

- [1] Yongchao He and **Wenfei Wu**. “**Fully Functional Rate Limiter Design on Programmable Hardware Switches**”. In: *Proceedings of the ACM SIGCOMM 2019 Conference*. SIGCOMM Poster '19. 2019.
- [2] Hongyi Huang and **Wenfei Wu**. “**NFD: Using Behavior Models to Develop Cross-Platform NFs**”. In: *Proceedings of the ACM SIGCOMM 2019 Conference*. SIGCOMM Poster '19. 2019.
- [3] Qingxiu Liu, **Wenfei Wu**, and Qingsong Liu. “**TT-DNS: Trustworthy Third-Party DNS Service with Privacy Preserving**”. In: *Proceedings of the 3rd Asia-Pacific Workshop on Networking*. APNet Poster '19. 2019.
- [4] Bangwen Deng and **Wenfei Wu**. “**Redundant Logic Elimination for Network Functions**”. In: *Proceedings of the ACM SIGCOMM 2018 Conference*. SIGCOMM Poster '18. 2018.
- [5] Keqiang He, Weite Qin, Qiwei Zhang, **Wenfei Wu**, Junjie Yang, Tian Pan, Chengchen Hu, Jiao Zhang, Aditya Akella, and Ying Zhang. “**Improving Latency and Burst-tolerance for Software Rate Limiters**”. In: *Presented in the 14th USENIX Symposium on Networked Systems Design and Implementation*. NSDI Poster '17. 2017.
- [6] Cong Liu, Yong Cui, **Wenfei Wu**, and Jianping Wu. “**Protecting Privacy of NF states in NFV management Systems with Trusted Execution Environment**”. In: *Proceedings of the 2017 Asia-Pacific Workshop on Networking*. APNet Poster '17. 2017.
- [7] **Wenfei Wu** and Ying Zhang. “**Lancet: Extracting Forwarding Models from NF Programs**”. In: *Proceedings of the 2017 IEEE Conference on Computer Communications*. INFOCOM Poster '17. 2017.
- [8] **Wenfei Wu**, Guohui Wang, Aditya Akella, and Anees Shaikh. “**Virtual network diagnosis as a service**”. In: *Proceedings of 2014 Open Networking Summit*. ONS Poster '14. 2014.
- [9] **Wenfei Wu**, Yoshio Turner, and Mike Schlansker. “**Routing optimization for ensemble routing**”. In: *Proceedings of the 2011 ACM/IEEE Seventh Symposium on Architectures for Networking and Communications Systems*. ANCS Poster '11. 2011.

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