

Minmei Wang

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Research Interests

Internet of Things, network security, SDN, edge computing, data management

Education

09/2017 - 06/2022 **University of California, Santa Cruz, USA**

Ph.D. in Computer Science and Engineering

Chancellor's Dissertation-Year Fellowship, only *one* recipient in the School of Engineering

Advisor: Chen Qian

09/2014 - 06/2017 **Nanjing University, China**

Master in Computer Science and Technology

Advisor: Yihua Huang

09/2010 - 06/2014 **Nanjing University of Posts and Telecommunications, China**

B.E. in Computer Science,

Advisor: Long Hong (Excellent graduation thesis)

Publications

2021

1. [CCS] Xiaofeng Shi, Shouqian Shi, **Minmei Wang**, Jonne Kaunisto, Chen Qian, On-device IoT Certificate Revocation Checking with Small Memory and Low Latency, in *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, 2021.
2. [ToN] Xiaofeng Shi, Haofan Cai, **Minmei Wang**, Ge Wang, Baiwen Huang, Junjie Xie, and Chen Qian, TagAttention: Mobile Object Tracing without Object Appearance Information by Vision-RFID Fusion, in *Proceedings of IEEE Transactions on Networking (ToN)*, 2021.
3. [ToN] Junjie Xie, Chen Qian, Deke Guo, **Minmei Wang**, Ge Wang, Honghui Chen, COIN: An Efficient Indexing Mechanism for Unstructured Data Sharing Systems, in *Proceedings of IEEE Transactions on Networking (ToN)*, 2021.

2020

4. [ToN] **Minmei Wang**, Chen Qian, Xin Li and Shouqian Shi, Collaborative Validation of Public-Key Certificates for IoT by Distributed Caching, in *Proceedings of IEEE Transactions on Networking (ToN)*, 2020.
5. [HotNets] Chen Qian, Shouqian Shi, Xiaofeng Shi, and **Minmei Wang**, Don't Work on Individual Data Plane Algorithms. Put Them Together! in *Proceedings of ACM Workshop on Hot Topics in Networks (HotNets)*, 2020.

2019

6. [VLDB] **Minmei Wang**, Mingxun Zhou, Shouqian Shi, and Chen Qian. Vacuum Filters: More Space-Efficient and Faster Replacement for Bloom and Cuckoo Filters, in *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, 2019.
7. [INFOCOM] **Minmei Wang**, Chen Qian, Xin Li and Shouqian Shi, Collaborative Validation of Public-Key Certificates for IoT by Distributed Caching, in *Proceedings of IEEE International Conference on Computer Communications (INFOCOM)*, 2019.

8. **[ToN]** Xin Li, **Minmei Wang**, Huazhe Wang, Ye Yu, and Chen Qian, Towards Secure and Efficient Communication for the Internet of Things, in *Proceedings of IEEE Transactions on Networking (ToN)*, 2019.
9. **[ICNP]** Xiaofeng Shi, **Minmei Wang**, Ge Wang, Baiwen Huang, Haofan Cai, Junjie Xie, and Chen Qian, TagAttention: Mobile Object Tracing without Object Appearance Information by Vision-RFID Fusion, in *Proceedings of IEEE International Conference on Network Protocols (ICNP)*, 2019.
10. **[ICNP]** Shouqian Shi, Chen Qian, and **Minmei Wang**, Re-designing Compact-structure based Forwarding for Programmable Networks, in *Proceedings of IEEE International Conference on Network Protocols (ICNP)*, 2019.
11. **[INFOCOM]** Junjie Xie, Chen Qian, Deke Guo, **Minmei Wang**, Shouqian Shi, and Honghui Chen, Efficient Indexing Mechanism for Unstructured Data Sharing Systems in Edge Computing, in *Proceedings of IEEE International Conference on Computer Communications (INFOCOM)*, 2019.
12. **[IoTDI]** Xin Li, **Minmei Wang**, Shouqian Shi, and Chen Qian, VERID: Towards Verifiable IoT Data Management, in *Proceedings of ACM/IEEE International Conference on Internet of Things Design and Implementation (IoTDI)*, 2019.
13. **[ICNP]** Haofan Cai, Ge Wang, Xiaofeng Shi, Junjie Xie, **Minmei Wang**, and Chen Qian, When Tags 'Read' Each Other: Enabling Low-cost and Convenient Tag Mutual Identification, in *Proceedings of IEEE International Conference on Network Protocols (ICNP)*, 2019.

2018

14. **[Tapia]** Ge Wang, Haofan Cai, **Minmei Wang**, Chen Qian, and Jinsong Han, Poster: Replay-resilient Physical-layer Authentication for Battery-free IoT Devices, in *Proceedings of ACM Richard Tapia Celebration of Diversity in Computing (Tapia)*, 2018.

2016

15. **[ICONIP]** **Minmei Wang**, Bo Zhao, Yihua Huang, PTR: phrase-based topical ranking for automatic keyphrase extraction in scientific publications, in *Proceedings of International Conference on Neural Information Processing (ICONIP)*, 2016.

Honors and Awards

- Chancellor's Dissertation-Year Fellowship (only one recipient in the School of Engineering), UCSC, 2021-2022
- Finalists of UCSC Grad Slam 2019
- Student Travel Award of IEEE INFOCOM, 2019
- Enterprise Individual Award-Excellence Award on the sentiment analysis task for Big Data & Computing Intelligence Contest, China, 2016
- 10th in the 1002 team in 2016 BYTECUP International Machine Learning Competition, China, 2016
- 2nd Prize for Graduate Academic Scholarship for each year, Nanjing University Sept. 2014-June 2017

Talks & Presentations

1. **Vacuum Filters: More Space-Efficient and Faster Replacement for Bloom and Cuckoo Filters**, on VLDB conference, virtual, 2020;
2. **Efficient and secure communication for the Internet of Things (IoT)**, UCSC Grad Slam 2019;
3. **Collaborative Validation of Public-Key Certificates for IoT by Distributed Caching**, on IEEE INFOCOM conference, Paris, France, 2019;
4. **Efficient Indexing Mechanism for Unstructured Data Sharing Systems in Edge Computing**, on IEEE INFOCOM conference, Paris, France, 2019.

Teaching Experience

Teaching Assistant, CMPE150: Introduction to Computer Networks, UC Santa Cruz, Winter 2018.

Teaching Assistant, CSE80N: Introduction to Networking and the Internet, UC Santa Cruz, Fall 2019 and Spring 2021.

Teaching Assistant, CSE253: Network Security, UC Santa Cruz, Winter 2020.

Teaching Assistant, CSE250A: Computer Networks, UC Santa Cruz, Fall 2020.

Teaching Assistant, CSE107: Probability and Statistics for Engineers, UC Santa Cruz, Winter 2021.