

Yunsheng Wang

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EMPLOYMENT	Kettering University Associate Professor Assistant Professor	Flint, USA 7/2019 - Present 9/2013 - 6/2019
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EDUCATION	Temple University Ph.D in Computer and Information Sciences	Philadelphia, USA 8/2009 - 8/2013
	University College London M.Res in Telecommunications	London, UK 9/2007 - 9/2008
	Dalian University of Technology B.Eng in Electronic and Information Engineering	Dalian, China 9/2003-7/2007

RESEARCH INTERESTS	Mobile Computing and Wireless Networks Vehicular Networks Autonomous Vehicle Social Network Applications
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TEACHING EXPERIENCE	Associate Professor (7/2019 - present) Assistant Professor (9/2013 - 6/2019)	Kettering University, USA
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- CS 202 System Programming Concepts
- CS 203 Computing and Algorithms III
- CS 231 Programming Language Paradigms
- CS 351 Cloud Computing
- CS 457 Wireless and Mobile Security
- CS 491 Advanced Mobile & Networking Applications

SPONSORED RESEARCH	<ul style="list-style-type: none">• Secure and Trustworthy Connected Vehicles (co-PI) 11/2019 - 11/2020 <i>Sponsor:</i> Kettering University Faculty Research Fellowship Award (\$6,000)• Integration of Wireless Sensor Networks and Mobile Social Networks – Crowd-sensing (PI) 11/2018 - 11/2019 <i>Sponsor:</i> Kettering University Faculty Research Fellowship Award (\$6,000)• SAE AutoDrive Challenge (Co-PI) 3/2017 - 3/2020 <i>Sponsor:</i> Society of Automotive Engineers (SAE) and General Motors (GM) (\$138,000)• Byrne Criminal Justice Innovation Program: Planning and Implementation: Flint's University Avenue Corridor Coalition (UACC) (Co-PI) 10/2014 - 9/2017 <i>Sponsor:</i> U.S. Department of Justice (\$1,000,000)
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- MRI: Acquisition of 4G LTE and WiMAX Wireless System to Facilitate Multidisciplinary Research Efforts and Enhance Undergraduate Research Training (PI) (CNS 1429352) 9/2014 - 8/2016
Sponsor: National Science Foundation (NSF) (\$143,920)

AWARD

- Kettering University Outstanding New Researcher Award 2017 *In recognition of significant contributions in the area of Wireless Network.*
- ACM Future of Computing, the most popular project award: “*Detecting fake users in online social network*”: twitter anti-spam system based on analyzing of social graph, 2010.
- IEEE Infocom 2012 student travel grant.
- Scholarship for The Second GENI Research and Educational Experiment Summer Camp (GREE-SC 2013).
- The 19th GENI Engineering Conference (GEC19) Travel Grant, 2014

PUBLICATIONS *Book and Book Chapter*

1. Jie Wu and **Yunsheng Wang** (Eds.). “Opportunistic Mobile Social Networks”, CRC Press, 1st Edition. ISBN: 978-1466594944, 541 pages. August 5, 2014.
2. **Yunsheng Wang** and Jie Wu. “Multicast in Opportunistic Networks”, in *Opportunistic Mobile Social Networks*, J. Wu and Y. Wang (Eds.), CRC Press. 2014.

Journal Papers

3. Mingjun Xiao, Jie Wu, Liusheng Huang, Ruhong Cheng and **Yunsheng Wang**, “Online Task Assignment for Crowdsensing in Predictable Mobile Social Networks”, *IEEE Transactions on Mobile Computing*, vol. 16, no. 8, pp. 2306-2320, Aug. 1 2017.
4. Daqiang Zhang, Shengjie Zhao, Laurence T. Yang, Min Chen, **Yunsheng Wang**, and Huazhong Liu, “NextMe: Localization Using Cellular Traces in Internet of Things”, *IEEE Transactions on Industrial Informatics*, vol. 11, no. 2, pp. 302-312, April 2015.
5. Jie Wu and **Yunsheng Wang**. “Hypercube-based Multi-path Social Feature Routing in Human Contact Networks”, *IEEE Transactions on Computers (TC)*, vol. 63, no. 2, pp. 383-396, February, 2014.
6. **Yunsheng Wang**, Jie Wu, and Wei-Shih Yang. “Cloud-based Multicasting with Feedback in Mobile Social Networks”, *IEEE Transactions on Wireless Communications (TWC)*, vol. 12, no. 12, pp. 6043-6053, December, 2013.
7. **Yunsheng Wang**, Wei-Shih Yang, and Jie Wu. “Analysis of a Hypercube-based Social Feature Multi-Path Routing in Delay Tolerant Networks”, *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, vol. 24, no. 9, pp. 1706-1716, Sept., 2013.
8. **Yunsheng Wang**, and Jie Wu. “Ticket-based Multiple Packet Broadcasting in Delay Tolerant Networks”, *Journal of Ad Hoc & Sensor Wireless Networks*, Vol. 19, No. 3-4, 171-188, 2013.
9. **Yunsheng Wang**, and Jie Wu. “A Dynamic Multicast Tree based Routing Scheme without Replication in Delay Tolerant Networks”, *Journal of Parallel and Distributed Computing (JPDC)*, Volume 72, Issue 3, Pages 424-436, 2012.
10. **Yunsheng Wang**, Xiaoguang Li, and Jie Wu. “Delegation Forwarding in Delay Tolerant Networks Multicasting”, *Journal of Communications*, Vol 6, No 5 (2011), 384-392, Aug. 2011.

Conference Papers

11. Ning Wang, and **Yunsheng Wang**, “AutoWaze: Towards Automatic Event Inference in Intelligent Transportation Systems”, *Accept to be appear in Midscale Education and Research Infrastructure and Tools (MERIT) In conjunction with IEEE ICNP*, Chicago, October 7-10, 2019.
12. Xuefeng Ji, Wenquan Xu, Chuwen Zhang, Tong Yun, Gong Zhang, Xiaojun Wang, **Yunsheng Wang**, and Bin Liu. “Keep Forwarding Path Freshest in VANET via Applying Reinforcement Learning”, *In The First International Workshop on Network Meets Intelligent Computations In conjunction with IEEE ICDCS 2019*, Dallas, TX, July 7-10, 2019.
13. Rachel Wyatt, **Yunsheng Wang**, and Tom Wyatt. “City Life: Tourism and Residential Engagement Mobile and Web Application” (Poster), *Smart Cities Connect*, Denver, CO, April 2019.
14. **Yunsheng Wang**, and John Geske. “Next Generation Vehicle Network Application” (Poster), *The Network Innovators Community Event (GENI NICE)*, in conjunction with *ACM ICNP 2017*, Toronto, Canada, October 2017.
15. **Yunsheng Wang**, Noah Causin, John Geske, Jie Wu, Chiu C. Tan, and Anduo Wang. “A Vehicle Testbed for Future Intelligent Transportation System” (Poster), *The Network Innovators Community Event (GENI NICE)*, in conjunction with *ACM CoNEXT 2016*, Irvine, CA, December 2016.
16. Ke Fan, Daqiang Zhang, **Yunsheng Wang**, and Shengjie Zhao. “Discovering Urban Social Functional Regions Using Taxi Trajectories”, *In the 12th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2015)*, Beijing, August 2015.
17. Mingjun Xiao, Jie Wu, Liusheng Huang, **Yunsheng Wang**, and Cong Liu. “Multi-Task Assignment for CrowdSensing in Mobile Social Networks”, *In the 34th Annual IEEE International Conference on Computer Communications (INFOCOM)*, Hong Kong, April 2015.
18. **Yunsheng Wang**, Jie Wu, and Mingjun Xiao. “Hierarchical Cooperative Caching in Mobile Opportunistic Social Networks”, *In IEEE Global Communications Conference (GlobeCom)*, Austin, TX, USA, December 2014.
19. **Yunsheng Wang**, Jie Wu, Mingjun Xiao, and Daqiang Zhang. “Heterogeneous Community-based Routing in Opportunistic Mobile Social Networks”, *In the third Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet)*, in conjunction with *IEEE MASS 2014*, Philadelphia, PA, October, 2014.
20. **Yunsheng Wang**, and Jie Wu. “Complex Contagions in Opportunistic Mobile Social Networks”, *In IEEE the 23rd International Conference on Computer Communications and Networks (ICCCN)*, Shanghai, China, August 2014.
21. Huanyang Zheng, **Yunsheng Wang**, and Jie Wu. “Optimizing Multi-copy Two-hop Routing in Mobile Social Networks”, *In IEEE International Conference on Sensing, Communication, and Networking (SECON)*, Singapore, June 2014.
22. **Yunsheng Wang** and Jie Wu. “Social-tie-based Information Influence in Mobile Opportunistic Social Networks”, *In the 14th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)*, Madrid, Spain, June 2013.
23. **Yunsheng Wang**, Jie Wu, Zhen Jiang, and Feng Li. “A Joint Replication-Migration-based Routing in Delay Tolerant Networks”, *In IEEE International Conference on Communications (ICC)*, Ottawa, Canada, June 2012.

24. Jie Wu and **Yunsheng Wang**. “Social Feature-based Multi-path Routing in Delay Tolerant Networks”. In *The 31st Annual IEEE International Conference on Computer Communications (INFOCOM)*, Orlando, FL, March 2012.
25. **Yunsheng Wang**, Yuhong Guo, and Jie Wu. “Making Many People Happy: Greedy Solutions for Content Distribution”, In *The 40th Annual IEEE International Conference on Parallel Processing (ICPP)*, Taipei, Taiwan, September 2011.
26. **Yunsheng Wang**, Xiaoguang Li, and Jie Wu. “Multicasting in Delay Tolerant Networks: Delegation Forwarding”, In *IEEE Global Communications Conference (GLOBECOM)*, Miami, December 2010.
27. Jie Wu and **Yunsheng Wang**. “A Non-Replication Multicasting Scheme in Delay Tolerant Networks”. In *The 7th IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, San Francisco, November 2010.
28. Chi-Kin Chau, Muhammad Husni Wahab, Fei Qin, **Yunsheng Wang**, and Yang Yang. “Battery Recovery Aware Sensor Networks”, In *IEEE 7th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)*, Seoul, June 2009.

INVITED TALKS

1. Autonomous and Connected Vehicles, *SGMW, Guangxi Science & Technology Department, Zhejiang Science & Technology Department, SAIC, and Tongji University*, China, June 2019
2. Autonomous and Connected Vehicles, *Tongji University*, Shanghai, China, January 2018
3. Smart Vehicle Testbed for Future Intelligent Transportation System, *The United States Army Tank Automotive Research, Development and Engineering Center (TARDEC)*, Warren, MI June 2017
4. Vehicular Ad Hoc Networks (VANETs) , *Shanghai Automotive Industry Corporation (SAIC), SAIC-GM-Wuling Automobile (SGMW), and China Automotive Technology and Research Center (CATARC)*, China, September 2016
5. A Vehicle Testbed for Future Intelligent Transportation System, *Continental*, Troy, MI July 2016
6. Flint Ignite, *NSF Future Wireless Cities Workshop*, Washington DC, February 2016.
7. Next Generation Wireless Networks, *Tongji University*, Shanghai, China, March 2015
8. Hierarchical Cooperative Caching in Mobile Opportunistic Social Networks, In *IEEE Global Communications Conference (Globecom)*, Austin, TX, USA, December 2014.
9. Heterogeneous Community-based Routing in Opportunistic Mobile Social Networks, In *the third Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet), in conjunction with IEEE MASS 2014*, Philadelphia, PA, October, 2014.
10. Social Feature-based Multi-path Routing in Delay Tolerant Networks, *The 31st Annual IEEE International Conference on Computer Communications (INFOCOM)*, Orlando, FL, March 2012.
11. Multicasting in Delay Tolerant Networks: Delegation Forwarding, *IEEE Global Communications Conference (GLOBECOM)*, Miami, December 2010.

12. Harnessing Battery Recovery Effect in Wireless Sensor Networks, *London Communications Research Symposium (LCS)*, London, UK, September 2008

PROFESSIONAL ACTIVITIES

- Member of IEEE
- Member of Upsilon Pi Epsilon
- Editor of the International Journal of Ad Hoc and Ubiquitous Computing
- Track co-Chair of Cognitive, Ad Hoc, Mobile, and Mesh Networks (CAMM), in The 2th International Conference on Computer Communications and Networks (ICCCN 2020) Honolulu, Hawaii, USA, August 3 - 6, 2020.
- Track Chair of Internet of Things and Cyber-Physical-Social Computing Track, in the 16th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), Granada, Spain, December 2016
- Organizer of the 2013 NSF CISE Career Proposal Writing Workshop, Philadelphia, PA, USA, March 15, 2013
- Track Co-Chair of The First International Workshop on Mobile Sensing, Computing and Communication (MSCC), Philadelphia, PA, USA, August, 2014, co-located with ACM Mobihoc 2014
- Session Chair of IEEE Global Communications Conference (Globecom), Austin, TX, USA, December 2014.
- Session Chair of the 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), Philadelphia, PA, USA, October, 2014
- Session Chair of the third Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet), in conjunction with IEEE MASS 2014, Philadelphia, PA, USA, October, 2014

Proposal Review

- NSF Panelist, 2018
- Swiss National Science Foundation (SNSF) External Proposal Reviewer, 2017

Program Committee

1. IEEE Wireless Communications and Networking Conference (WCNC) 2020 Mac and Cross Layer Design Track
2. IEEE International Conference on Communications (ICC) 2020 SAC Internet of Things Track
3. The 10th IEEE International Workshop on Trust, Security and Privacy for Big Data (TrustData), 2019
4. The 21th IEEE International Conference on High Performance Computing and Communications (HPCC), 2019
5. Global IoT Summit (GloTS), 2019
6. The 2019 International Symposium on Ubiquitous Networking (UNet'19)
7. The IEEE 5th World Forum on Internet of Things (WF-IoT), 2019
8. IEEE International Conference on Communications (ICC) 2019 SAC Symposium Social Networking Track
9. The Thirteenth International Conference on Systems and Networks Communications (ICSNC), 2018

10. The 20th IEEE International Conference on High Performance Computing and Communications (HPCC), 2018
11. The 4th IEEE International Conference on Cloud and Big Data Computing (CB-DCoM), 2018
12. The Eighth International Conference on Advanced Communications and Computation (INFOCOMP), 2018
13. The Eighth International Conference on Mobile Services, Resources, and Users (MOBILITY), 2018
14. The 27th International Conference on Computer Communication and Networks (ICCCN), 2018
15. The Fourth International Symposium on Ubiquitous Networking (UNet), 2018
16. Global Internet of Things Summit (GloTS), 2018
17. IEEE International Conference on Communications (ICC) 2018 SAC Symposium Social Networking Track
18. IEEE 4th World Forum on Internet of Things (WF-IoT), 2018
19. The 7th International Symposium on Trust, Security and Privacy for Emerging Applications (TSP), 2017
20. The 8th IEEE International Workshop on Trust, Security and Privacy for Big Data (TrustData), 2017
21. The 17th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), 2017
22. The 26th International Conference on Computer Communication and Networks (ICCCN), 2017
23. The 3rd International Symposium on Ubiquitous Networking (UNet), 2017
24. IEEE 3rd World Forum on Internet of Things (WF-IoT), 2017
25. The Twelfth International Conference on Systems and Networks Communications (ICSNC), 2017
26. The Eleventh International Conference on Advanced Engineering Computing and Applications in Sciences (ADVCOMP), 2017
27. The Seventh International Conference on Ambient Computing, Applications, Services and Technologies (AMBIENT), 2017
28. Global IoT Summit (GloTS), 2017
29. INFOCOM, 2016
30. The 12th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), 2016
31. The 9th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage (SpaCCS), 2016
32. The 6th International Symposium on Trust, Security and Privacy for Emerging Applications (TSP), 2016
33. The 9th International Conference on Cyber, Physical, and Social Computing (CPSCom), 2016
34. The 16th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), 2016
35. The 1st International Workshop on Trust, Security and Privacy for Big Data (BigTrust), 2016

36. The 7th IEEE International Workshop on Trust, Security and Privacy for Big Data (TrustData), 2016
37. The 25th International Conference on Computer Communication and Networks (ICCCN), 2016
38. The 13th International Conference on Mobile Systems and Pervasive Computing (MobiSPC), 2016
39. The 5th International Symposium on Trust, Security and Privacy for Emerging Applications (TSP), 2015
40. The 6th IEEE International Workshop on Trust, Security and Privacy for Big Data (TrustData), 2015
41. The 15th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), 2015
42. The 6th International Conference on Ambient Systems, Networks and Technologies (ANT), 2015
43. The 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), 2015
44. The Third International Workshop on Internet of Things, Machine to Machine and Smart Services Applications (IoT), 2015
45. The 12th International Conference on Mobile Systems and Pervasive Computing (MobiSPC), 2015
46. The 13th International Symposium on Pervasive Systems, Algorithms, and Networks (I-SPAN), 2014
47. The 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), 2014
48. The 5th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN), 2014
49. The 11th International Conference on Mobile Systems and Pervasive Computing (MobiSPC), 2014
50. The 5th IEEE International Workshop on Trust, Security and Privacy for Big Data (TrustData), 2014
51. The 5th International Conference on Ambient Systems, Networks and Technologies (ANT), 2014
52. International Workshop on Resource Management of Cloud Computing (CCRM), 2013, co-located with ICDCS 2013

Journal Reviewer

- IEEE/ACM Transactions on Networking
- IEEE Transactions on Wireless Communications
- IEEE Transactions on Mobile Computing
- IEEE Transactions on Parallel and Distributed Systems
- IEEE Transactions on Vehicular Technology
- IEEE Sensors Journal
- IEEE Wireless Communications Letters
- IEEE Wireless Communications Magazine
- IEEE Access

- Elsevier Journal of Parallel and Distributed Computing
- Elsevier Ad Hoc Networks
- Springer Multimedia Systems
- Springer Wireless Networks
- EURASIP Journal on Wireless Communications and Networking
- International Journal of Sensor Networks
- Journal of Computer Science and Technology
- Journal of Ad Hoc & Sensor Wireless Networks
- Scientific Research and Essays