

PATENT

1. Rapid Localization Platform for Location Based Applications in Self-Organized Networks, *pending*, No. 62/174,046

PUBLICATIONS

Journal Articles

1. Tao Jing, Xing Wei, **Wei Cheng**, Mingyang Guan, Yan Huo, Xiuzhen Cheng, "An Efficient Scheme for Tag Information Update in RFID Systems on Roads" in press *IEEE Transactions on Vehicular Technology*.
2. Wei Zhou, Tao Jing, **Wei Cheng**, Tao Chen, Yan Huo, "Combinatorial auction based spectrum allocation under heterogeneous supply and demand", in *Elsevier Computer Communications*, vol. 60, pp. 109-118, April 2015.
3. Tao Jing, Xuewei Cui, **Wei Cheng**, Shixiang Zhu, Yan Huo, Xiuzhen Cheng, "Enabling Smartphone Based HD Video Chats by Cooperative Transmissions in CRNs", in *EURASIP Journal on Wireless Communications and Networking*, vol.2015, no.1, March 2015.
4. Tao Jing, Fan Zhang, **Wei Cheng**, Yan Huo, Xiuzhen Cheng, "Online Auction Based Relay Selection for Cooperative Communication in CR Networks", in *EURASIP Journal on Wireless Communications and Networking*, vol.2015, no.1, February 2015.
5. Yuan Le, Liran Ma, **Wei Cheng**, Xiuzhen Cheng, Biao Chen, "A Time Fairness Based MAC Algorithm for Throughput Maximization in 802.11 Networks", in *IEEE Transactions on Computers*, vol.64, no.1, pp.19-31, January 2015.
6. David S Jackson, Wanyu Zang, Qijun Gu, **Wei Cheng**, Meng Yu, "Exploiting and Defending Trust Models in Cooperative Spectrum Sensing", in *EURASIP Journal on Wireless Communications and Networking*, vol.2015, no.1, January 2015.
7. Xinlei Wang, **Wei Cheng**, Prasant Mohapatra, Abdelzaher, T. "Enabling Reputation and Trust in Privacy-Preserving Mobile Sensing" in *IEEE Transactions on Mobile Computing*, vol. 13, no. 12, pp. 2777-2790, December 2014.
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11. **Wei Cheng**, Shengling Wang, Xiuzhen Cheng, "Virtual Track: Applications and Challenges of the RFID System on Roads", in *IEEE Network*, vol. 28, no. 1, pp 42-47, January 2014.
12. Shraboni Jana, Kai Zeng, **Wei Cheng**, Prasant Mohapatra, "Trusted Collaborative Spectrum Sensing for Mobile Cognitive Radio Networks", in *IEEE Transactions on Information Forensics and Security*, vol. 8,

no.9, pp. 1497-1507, September 2013.

13. Xiaoshuang Xing, Tao Jing, **Wei Cheng**, Yan Huo, Xiuzhen Cheng, "Spectrum Prediction in Cognitive Radio Networks" in *IEEE Wireless Communications*, vol. 20, no. 2, pp. 90-96, April 2013.
14. **Wei Cheng**, Nan Zhang, Min Song, Dechang Chen, Xiuzhen Cheng, "Time-Bounded Essential Localization for Wireless Sensor Networks", in *IEEE/ACM Transactions on Networking* vol. 21, no.2, pp. 400-412, April 2013.
15. **Wei Cheng**, Xiuzhen Cheng, Min Song, Biao Cheng, Wendy W. Zhao, "On the Design and Deployment of RFID Assisted Navigation Systems for VANET", in *IEEE Transactions on Parallel and Distributed System*, vol. 23, no. 7, pp. 1267-1274, July 2012.
16. Yingchang Xiang, Kai Xing, **Wei Cheng**, E.K. Park, Shmuel Rotenstreich, "Distributed Virtual Backbone Construction in Sensor Networks with Asymmetric Links", in *Wireless Communications and Mobile Computing*, vol. 11, no. 8, pp. 1051-1060, August 2011.
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18. **Wei Cheng**, Zexin Lu, Hong Wang, "A New Kind of Load Balance Technology for Server Cluster Systems", in *Computer Engineering & Science*, vol. 28 no. 2, 2006.
19. Liu Yuju, **Wei Cheng**, Wang Xiaozhe, Zhao Peng, "The mitigation of the network bottleneck problem in the center dispatching cluster system", in *Computer Engineering and Design*, no.11, 2005.
20. **Wei Cheng**, Yujun Liu, Zexin Lu, "Best Reordered String-Matching Algorithm", in *Computer Engineering and Design*, pp. 1430-1433, vol.25 no. 9, 2004.

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21. Bo Mei, **Wei Cheng**, Xiuzhen Cheng, "Fog Computing Based Ultraviolet Radiation Measurement via Smartphones", in *HotWeb 2015, Nov. 12-13, 2015, Washington DC*.
22. Xiaolu Cheng, Jessica Lu, **Wei Cheng**, "A Survey on RFID Applications in Vehicle Networks", in *IIKI 2015, Oct. 22-23, Beijing, China*.
23. **Wei Cheng**, Xiaolu Cheng, Dechang Chen, "Utilizing RSS-Ratio for Implementing Anonymous Communications in VANETs", in *ICCVI 2015, Oct. 19-23, Shenzhen, China*.
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25. Yan Huo, Yumeng Lu, **Wei Cheng**, Tao Jing, "Vehicle Road Distance Measurement and Maintenance in RFID Systems on Roads", in *IEEE ICCVE 2014, Nov. 3-7, Austria*.
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27. David Jackson, Wanyu Zang, Qijun Gu, **Wei Cheng**, Meng Yu, "Exploiting and Defending Trust Models

- in Cooperative Spectrum Sensing”, in *WASA 2014*, June 2014, China.
28. Tao Jing, Xuewei Cui, **Wei Cheng**, Shixiang Zhu, Yan Huo, “Enabling Smartphone Based HD Video Chats by Cooperative Transmissions in CRNs”, in *WASA 2014*, June 2014, China.
 29. **Wei Cheng**, Jindan Zhu, Prasant Mohapatra, Jie Wang, “Time and Energy Efficient Localization”, in *IEEE SECON 2014*, pp. 2869-2877, June 2014, Singapore.
 30. Tao Jing, Xing Wei, **Wei Cheng**, Mingyang Guan, Yan Huo, “Emergent Information Diffusion in RFID Systems on Roads”, in *IEEE ICCVE 2013*, December 2-6, 2013, Las Vegas, USA.
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 32. **Wei Cheng**, “Engineering Challenges in RFID Systems on Roads”, in *ICAPEM 2013*, Nov. 21-22, 2013, Shanghai, China.
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 34. Bowu Zhang, **Wei Cheng**, Limin Sun, Xiuzhen Cheng, Taieb Znati, Mznah A. Al-Rodhaan, Abdullah Al-Dhelaan, “Queuing Modeling for Delay Analysis in Mission Oriented Sensor Networks under the Protocol Interference Model”, in *ACM MiSeNet’13*, October 4, 2013, Miami, Florida, USA. (Best Paper Award)
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 41. **Wei Cheng**, Dengyuan Wu, Xiuzhen Cheng, Denchang Chen, “Routing for Information Leakage Reduction in Multi-Channel Multi-Hop Ad-Hoc Social Networks”, in *WASA 2012*, pp. 31-42, August 8-10, 2012, Yellow Mountains, China.
 42. Limin Liu, Yujun Liu, **Wei Cheng**, “The Modeling and Analysis of Context and Cardinality Constraints Role-based Authorization Mechanism”, in *WASA 2012*, August 8-10, 2012, Yellow Mountains, China.

43. Yuan Le, Liran Ma, **Wei Cheng**, Xiuzhen Cheng, Biao Chen, "Maximizing Throughput When Achieving Time Fairness in Multi-Rate Wireless LANs", in *IEEE INFOCOM 2012 Mini-Conference*, pp. 2911-2915, March 25-30, 2012, Orlando, FL, USA .
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