

FENG LI

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Education

- Aug 2010 - Feb 2015 Ph.D., Nanyang Technological University, Singapore.
- Sep 2007 - Jul 2010 M.S. in Computer Science, Shandong University, China.
- Sep 2003 - Jul 2007 B.S. in Computer Science, Shandong Normal University, China.

Research Interests

Distributed Algorithms and Systems, Applied Optimization, Wireless Networking and Mobile/Pervasive Computing.

Research Experience

- Dec 2015 - Present Assistant Professor, School of Computer Science and Technology, Shandong University, China.
- Nov 2014 - Nov 2015 Postdoctoral Research Fellow, School of Computing, National University of Singapore (working with Prof Seth Gilbert and Prof Mun Choon Chan).
- Oct 2014 - Nov 2014 Research Intern in Institute for Infocomm Research, A*STAR, Singapore (working with Dr Derek Leong).

Publications

Journal Publications

1. **Feng Li**, Yanbing Yang, Zicheng Chi, Liya Zhao, Yaowen Yang, and Jun Luo. Trinity: Enabling Self-Sustaining WSNs Indoors with Energy-Free Sensing and Networking, ACM Transactions on Embedded Computing Systems, vol. 17, no. 2, pp. 57:1-57:27, 2018.
2. Yiran Shen, Tao Han, Qing Yang, Yong Wang, **Feng Li**, and Hongkai Wen. CS-CNN: Enabling Robust and Efficient Conventional Neural Networks Inference for Internet-of-Things Applications, IEEE ACCESS, vol. 6, pp. 13439 - 13448, 2018.
3. **Feng Li**, Jun Luo, Gaotao Shi and Ying He. ART: Adaptive fRequency-Temporal co-existing of ZigBee and WiFi, IEEE Transactions on Mobile Computing, vol. 16, no. 3, pp. 662-674, 2017.
4. Xiao Pan, Yuanfeng Zhou, **Feng Li**, and Caiming Zhang. Superpixels of RGB-D Images for Indoor Scenes Based on Weighted Geodesic Driven Metric, IEEE Transactions on Visualization and Computer Graphics, vol. 23, no. 10, pp. 2342-2356, 2017.

5. Yong Wang, Zhuoshi Yang, Jianpei Zhang, **Feng Li**, Hongkai Wen, and Yiran Shen. CS²-collector: A New Approach for Data Collection in Wireless Sensor Networks based on Two Dimensional Compress Sensing, *Sensors*, vol. 16, no. 8, 1318, 2016.
6. **Feng Li**, Jun Luo, Shiqing Xin and Ying He. Autonomous Deployment of Wireless Sensor Networks for Optimal Coverage with Directional Sensing Model, *Computer Networks*, vol. 108, no. 24, pp. 120-132, 2016.
7. **Feng Li**, Jun Luo, Wenping Wang, and Ying He. Autonomous Deployment for Load Balancing k-Surface Coverage in Sensor Networks, *IEEE Transactions on Wireless Communications*, vol. 14, no. 1, pp. 279-293, 2015.
8. Minqi Zhang, **Feng Li**, Ying He, Juncong Lin, Xianfeng David Gu, and Jun Luo. GRIP: Greedy Routing through dIstributed Parametrization for Guaranteed Delievery in 2D/3D Sensor Networks, *Wireless Networks*, vol. 21, no. 1, pp. 67-80, 2015.
9. **Feng Li**, Chi Zhang, Jun Luo, Shiqing Xin, and Ying He, LBDP: Localized Boundary Detection and Parametrization for 3D Sensor Networks, *IEEE/ACM Transactions on Networking*, vol. 22, no. 2, pp. 567-579, 2014.
10. **Feng Li**, Caiming Zhang, Xingqiang Yang, Peipei Li, Constructing C^1 triangular patch of degree six by the Boolean sum of an approximation operator and an interpolation operator, *Applied Mathematical Modelling*, vol. 35, no. 8, pp. 4058-4070, 2011.

Conference Publications

1. Chi Zhang, **Feng Li**, Jun Luo, Ying He. iLocScan: Harnessing Multipath for Simultaneous Indoor Source Localization and Space Scanning. In *Proceedings of the 12th ACM Conference on Embedded Networked Sensor Systems (SenSys'14)*, pp. 91-104, Memphis, TN, November 2014. [Acceptance Ratio = 21/117 (18%)]
2. Tianyu Xiang, Zicheng Chi, **Feng Li**, Jun Luo, Lihua Tang, Liya Zhao, Yaowen Yang. Powering Indoor Sensing with Airflows: A Trinity of Energy Harvesting, Synchronous Duty-Cycling, and Sensing. In *Proceedings of the 11th ACM Conference on Embedded Networked Sensor Systems (SenSys'13)*, pp. 16:1-16:14, Rome, Italy, November 2013. [Acceptance Ratio = 21/123 (17%)]
3. **Feng Li**, Tianyu Xiang, Zicheng Chi, Jun Luo, Lihua Tang, Liya Zhao, Yaowen Yang. Demo Abstract: Powering Indoor Sensing with Airflows - A Trinity of Energy Harvesting, Synchronous Duty-Cycling, and Sensing. In *Proceedings of the 11th ACM Conference on Embedded Networked Sensor Systems (SenSys'13)*, pp. 73:1-73:2, Rome, Italy, November 2013.
4. **Feng Li**, Jun Luo, Gaotao Shi, Ying He. FAVOR: Frequency Allocation for Versatile Occupancy of spectRum in Wireless Sensor Networks. In *Proceedings of the 14th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc'13)*, pp. 39-48, Bangalore, India, July 2013. [Acceptance Ratio = 24/234 (10%)]
5. Chi Zhang, Jun Luo, Liu Xiang, **Feng Li**, Juncong Lin, Ying He. Harmonic Quorum Systems: Data Management in 2D/3D Wireless Sensor Networks with Holes. In *Proceedings of the 9th IEEE Communications Society Conference on Sensor and Ad Hoc Communications and Networks (SECON'12)*, pp. 1-9, Seoul, Korea, June 2012. [Acceptance Ratio = 68/350 (19%)]
6. **Feng Li**, Jun Luo, Shiqing Xin, Wenping Wang, Ying He. LAACAD: Load bAlancing k-Area Coverage through Autonomous Deployment in Wireless Sensor Networks. In *Proceedings of the 32nd IEEE International Conference on Distributed Computing Systems (ICDCS'12)*, pp. 566-575, Macau, China, 2012. [Acceptance Ratio = 71/515 (13%)]

7. **Feng Li**, Jun Luo, Chi Zhang, Shiqing Xin, Ying He. UNFOLD: UNiform Fast On-Line Boundary Detection for Dynamic 3D Wireless Sensor Networks. In Proceedings of the 12th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc'11), pp. 14:1–14:11, Paris, France, May 2011. [Acceptance Ratio = 25/127 (19%)]
8. Jun Luo, **Feng Li**, and Ying He. 3DQS: Distributed Data Access in 3D Wireless Sensor Networks. In Proceedings of IEEE International Conference on Communications (ICC'11), pp. 1-5, Kyoto, Japan, June 2011.
9. Caiming Zhang, **Feng Li**, Dongmei Niu, Xingqiang Yang. Interpolation to C^1 boundary conditions by polynomial of degree six. In Proceedings of IEEE International Conference on Shape Modeling and Applications (SMI'09), pp. 126-131, Beijing, China, July 2009.

Projects

- *Self-Evolving and Unified Security Mechanism for Smart IoT Systems*
supported by National Natural Science Foundation of China (Key Project)
Jan 2019 - Dec 2023, Co-PI (Jointly working with Prof Xiuzhen Cheng)
- *Research on Sustainable Computing in Heterogeneous Sensor Networks: Sensing, Storage and Charging*
supported by National Natural Science Foundation of China
Jan 2018 - Dec 2020, PI
- *Reliable Data Storage in Large-Scale Heterogeneous Wireless Sensor Networks*
supported by Shandong Natural Science Foundation
Aug 2017 - Dec 2019, PI
- *AI-based Computation Modeling and Applications for Nano-Biological Systems*
supported by The Fundamental Research Funds of Shandong University
Jan 2018 - Dec 2020, Co-PI (Jointly working with Prof Weifeng Li)
- *Research on Block Chain Systems for Internet of Things*
supported by Huawei Innovation Research Projects
Dec 2017 - Sep 2018, Co-PI (Jointly working with Prof Zhiguo Wan)
- *Multi-Body Modeling in Complex Scenes Based on Distributed RGB-D Wireless Sensor Networks*
supported by The Key Research & Development Plan of Shandong Province
Aug 2017 - Aug 2019, Co-PI (Jointly working with Prof Yuanfeng Zhou)
- *Research on Co-existence of ZigBee and WiFi*
supported by The Fundamental Research Funds of Shandong University
Jan 2016 - Dec 2018, PI

Teaching

- Spring 2018, Computer Systems and Architecture (in Chinese)
- Fall 2017, Machine Learning (in English)
- Spring 2017, Computer Systems and Architecture (in Chinese)
- Fall 2016, Computer Organization and Design (in English)
- Spring 2016, Computer Systems and Architecture (in Chinese)

Professional Service

- Committee member of ACM SIGCOMM China
- Committee member of CCF Network and Data Communications
- Committee member of CCF Internet of Things
- Guest Editor of Elsevier Computer Networks
- TPC Member in
 - IEEE International Conference on Ubiquitous Intelligence and Computing (UIC) 2018
 - IEEE International Performance Computing and Communications Conference (IPCCC) 2018
- Reviewer in
 - IEEE Transactions on Mobile Computing (TMC)
 - IEEE Transactions on Parallel and Distributed Systems (TPDS)
 - IEEE Transactions on Computers (TC)
 - IEEE Transactions on Wireless Communications (TWC)
 - IEEE Transactions on Communications (TCOM)
 - ACM Transactions on Embedded Computing Systems (TECS)
 - Elsevier Computer Networks (ComNet)

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