





# Laura Li, Ph.D.

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## Overview

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### About Laura

Hongjuan (Laura) Li, Ph.D., is a technology specialist and patent agent in the Washington, D.C., office of Fish & Richardson P.C. She focuses her practice on patent prosecution in the electrical and computer technology industries. Dr. Li's technical expertise includes privacy and data security, cryptography, artificial intelligence (AI), wireless communication and networking, cloud computing, telecommunications, mobile social networks, sensor networks, cognitive radio networks, software, blockchain, and big data, among others. She has published research papers in top-rated scientific journals and conference proceedings. To view her scholarly research, [click here](#).

She has extensive experience in all aspects of patent drafting and prosecution, including meeting with inventors to identify inventive concepts, drafting claims and drawings, analyzing and responding to office actions, interviewing patent examiners, and drafting appeal briefs. Prior to joining Fish, Dr. Li was a technology specialist and patent agent at a global general practice law firm.

### Focus Areas

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#### Services

- Patent

#### Industries

- Digital Health

- Electrical and Computer Technology
- Financial and Business Services
- Internet
- Telecommunications

## Education

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Ph.D., Computer Science, George Washington University (2016)

Ph.D., Computer Applied Technology, Dalian University of Technology (2014)

M.S., Computer Applied Technology, Dalian University of Technology (2011)

B.S., Computer Science and Technology, Dalian Jiatong University (2008)

## Insights

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### Publications

Peer-Reviewed Journals:

Ruinian Li, Hongjuan Li, Xiuzhen Cheng, Keqiu Li, Shengling Wang and Rongfang Bie, "Perturbation Based Private Profile Matching in Social Networks", IEEE Access, vol. 5, pp. 19720-19732, September 2017.

Hongjuan Li, Xiuzhen Cheng, Keqiu Li, Rongfang Bie, Xiaoshuang Xing, and Tao Jing, "Utility-Based Cooperative Spectrum Sensing Scheduling in Cognitive Radio Networks", IEEE Transactions on Vehicular Technology (TVT), 66 (1), pp. 645-655, January 2017.

Chunqiang Hu, Hongjuan Li, Yan Huo, Tao Xiang, Xiaofeng Liao, "Secure and Efficient Data Communication Protocol for Wireless Body Area Networks", IEEE Transactions on Multi-Scale Computing System, vol. 2, no. 2, pp. 94-107, April 2016.

Hongjuan Li, Yingwen Chen, Xiuzhen Cheng, Keqiu Li, and Dechang Chen, "Secure Friend Discovery Based on Encounter History in Mobile Social Networks", Springer journal Personal and Ubiquitous Computing (PUC), vol. 19, no. 7, pp. 999-1009, October 2015.

Tao Jing, Shixiang Zhu, Hongjuan Li, Xiuzhen Cheng, Yan Huo, Rongfang Bie and Taieb Znati,

“Cooperative Relay Selection in Cognitive Radio Networks”, IEEE Transactions on Vehicular Technology (TVT), vol. 64, no. 5, pp. 1872-1881, May 2015.

Hongjuan Li, Xiuzhen Cheng, Keqiu Li, Chunqiang Hu, and Nan Zhang, “Robust Collaborative Spectrum Sensing Schemes in Cognitive Radio Networks”, IEEE Transactions on Parallel and Distributed Systems, vol. 25, no. 8, pp. 2190-2200, August 2014.

Hongjuan Li, Keqiu Li, Wenyu Qu, and Ivan Stojmenovic, “Secure and Energy-Efficient Data Aggregation with Malicious Aggregator Identification in Wireless Sensor Networks”, Future Generation Computer Systems, vol. 37, pp. 108-116, July 2014.

Xiaoshuang Xing, Tao Jing, Hongjuan Li, Yan Huo and Xiuzhen Cheng, “Optimal Spectrum Sensing Interval in Cognitive Radio Networks”, IEEE Transactions on Parallel and Distributed Systems, vol. 25, no. 9, pp. 2408-2417, September 2014.

Chunqiang Hu, Nan Zhang, Hongjuan Li and Xiuzhen Cheng, “Body Area Network Security: A Fuzzy Attribute-based Signcryption Scheme”, IEEE Journal on Selected Areas in Communications (JSAC), Special Issue on Emerging Technologies in Communications, vol. 31, no. 9, pp 37-46, September 2013

Hongjuan Li, Kai Lin, Keqiu Li, “Energy-Efficient and High-Accuracy Secure Data Aggregation in Wireless Sensor Networks”, Computer Communications, vol. 34, no. 4, pp 591-597, April 2011.

Book Chapter:

Dengyuan Wu, Bowu Zhang, Hongjuan Li and Xiuzhen Cheng, “Target Counting in Wireless Sensor Networks”, The Art of wireless sensor networks, pp. 235-269, 2014.

Peer-Reviewed Conference/Workshop Publications:

Ruinian Li, Hongjuan Li, Xiuzhen Cheng, Keqiu Li, Shengling Wang and Rongfang Bie, “Perturbation Based Private Profile Matching in Social Networks”, IEEE Symposium on Privacy-Aware Computing (IEEE PAC), pp. 198-199, Washington DC USA, August 2017.

Tianyi Song, Hongjuan Li, Xiuzhen Cheng, Jiguo Yu, Shengling Wang, Rongfang Bie, “Detecting Driver Phone Calls in Moving Vehicles Based on Voice Features”, IEEE INFOCOM, pp. 1-9, San Francisco USA, April 2016.

Hongjuan Li, Xiuzhen Cheng, Keqiu Li, and Zhi Tian, “Efficient Customized Privacy Preserving Friend Discovery in Mobile Social Networks”, IEEE ICDCS, pp. 225-234, Ohio USA, June 2015.

Hongjuan Li, Xiuzhen Cheng, Yingwen Chen, Keqiu Li, “Secure Friend Discovery Based on Encounter History in Mobile Social Networks”, IEEE IIKI, pp. 280-285, Beijing China, October 2014.

Chunqiang Hu, Fan Zhang, Tao Xiang, Hongjuan Li, Xiao Xiao, "A Practically Optimized Implementation of Attribute Based Cryptosystems", IEEE TrustCom, pp. 197-204, Beijing China, September 2014.

Hongjuan Li, Xiuzhen Cheng, Keqiu Li, Xiaoshuang Xing, and Tao Jing, "Utility-Based Cooperative Spectrum Sensing Scheduling in Cognitive Radio Networks", IEEE INFOCOM Mini-Conference, pp. 165-169, Turin Italy, April 2013.

Xiaoshuang Xing, Tao Jing, Yan Huo, Hongjuan Li and Xiuzhen Cheng, "Channel Quality Prediction Based on Bayesian Inference in Cognitive Radio Networks", IEEE INFOCOM, pp. 1465-1473, Turin Italy, April 2013.

Tao Jing, Shixiang Zhu, Hongjuan Li, Xiuzhen Cheng and Yan Huo, "Cooperative Relay Selection in Cognitive Radio Networks", IEEE INFOCOM Mini-Conference, pp. 175-179, Turin Italy, April 2013.

Xiulong Liu, Keqiu Li, Yanming Shen, Geyong Min, Bin Xiao, Wenyu Qu and Hongjuan Li, "A Fast Approach to Unknown Tag Identification in Large Scale RFID Systems", IEEE ICCCN, pp. 1-7, Nassau Bahamas, July 2013.

Hongjuan Li, Keqiu Li, Wenyu Qu, and Ivan Stojmenovic, "Secure and Energy-Efficient Data Aggregation with Malicious Aggregator Identification in Wireless Sensor Networks", IEEE ICA3PP, pp. 2-13, Melbourne Australia, October 2011. (Best Paper Award)

Long Ju, Hongjuan Li, Yaqiong Liu, Weilian Xue, Keqiu Li, and Zhongxian Chi, "An Improved Intrusion Detection Scheme based on Weighted Trust Evaluation for Wireless Sensor Networks", IEEE CUTE, pp. 1-6, Sanya China, December 2010.

## Languages

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- English
- Mandarin Chinese