

Yunghsiang S. Han
School of Electrical Engineering & Intelligentization
Dongguan University of Technology
No.1, University Road, Songshan Lake Sci. &Tech. Industry Park, Dongguan, Guangdong, 523808
P.R. China
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Education	SYRACUSE UNIVERSITY <ul style="list-style-type: none">• Ph.D. in Computer and Information Science (August 1993)<ul style="list-style-type: none">– <i>Dissertation Topic: Efficient Soft-Decision Decoding Algorithms for Linear Block Codes Using Algorithm A*</i>.– Winner of Syracuse University Doctoral Prize of the Year 1994.	Syracuse, NY
	NATIONAL TSING HUA UNIVERSITY <ul style="list-style-type: none">• MS in Electrical Engineering (June 1986)• BS in Electrical Engineering (June 1984)	Hsinchu, Taiwan, R. O. C.
Professional Experience	SCHOOL OF ELECTRICAL ENGINEERING & INTELLIGENTIZATION DONGGUAN UNIVERSITY OF TECHNOLOGY February 2017 – Present Distinguished Professor	Dongguan, China
	DEPARTMENT OF ELECTRICAL ENGINEERING NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY June 2011 – January 2017 Chair Professor.	Taiwan, R. O. C.
	COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE NATIONAL TAIPEI UNIVERSITY February 2015 – present Chair Professor in Science and Technology.	Taiwan, R. O. C.
	INSTITUTE OF NETWORK CODING THE CHINESE UNIVERSITY OF HONG KONG June 2014 – September 2014 January 2015 – February 2015 Visiting Scholar.	Hong Kong
	DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE SYRACUSE UNIVERSITY July 2012 – June 2013 Fulbright Visiting Scholar.	Syracuse NY , USA
	DEPARTMENT OF COMPUTER SCIENCE UNIVERSITY OF HOUSTON June 2011 – July 2011 Visiting Scholar.	Houston TX , USA

DEPARTMENT OF ELECTRICAL ENGINEERING
NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
August 2010 – May 2011
Professor. Taiwan, R. O. C.

GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING
NATIONAL TAIPEI UNIVERSITY
August 2009 – July 2010
Professor and Chairperson. Taiwan, R. O. C.

GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING
NATIONAL TAIPEI UNIVERSITY
August 2008 – July 2009
Professor. Taiwan, R. O. C.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
UNIVERSITY OF TEXAS AT AUSTIN
August 2008 – June 2009
Visiting Scholar. Austin TX , USA

GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING
NATIONAL TAIPEI UNIVERSITY
August 2004 – July 2008
Professor and Chairperson. Taiwan, R. O. C.

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING
NATIONAL CHI NAN UNIVERSITY
August 1998 – July 2004
Professor. Taiwan, R. O. C.

THE NEW YORK STATE CENTER FOR ADVANCED TECHNOLOGY IN
COMPUTER APPLICATIONS AND SOFTWARE ENGINEERING (CASE)
THE CENTER FOR SYSTEMS ASSURANCE (CSA)
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
SYRACUSE UNIVERSITY
September 2002 – January 2004
SUPRIA (Syracuse University Prototypical Research in Information Assurance)
Visiting Research Scholar. Syracuse NY, USA

DEPARTMENT OF ELECTRICAL ENGINEERING
UNIVERSITY OF HAWAII AT MANOA
June 2001 – October 2001
Visiting Scholar. Honolulu HI , USA

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING
NATIONAL CHI NAN UNIVERSITY
August 1998 – July 2001
The Head of Computer and Network Center. Taiwan, R. O. C.

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING
NATIONAL CHI NAN UNIVERSITY
August 1997 – July 1998
Associate Professor. Taiwan, R. O. C.

	DEPARTMENT OF ELECTRONIC ENGINEERING HUA FAN COLLEGE OF HUMANITIES AND TECHNOLOGY September 1994 – July 1996 The Head of Computer Center.	Taiwan, R. O. C.
	DEPARTMENT OF ELECTRONIC ENGINEERING HUA FAN COLLEGE OF HUMANITIES AND TECHNOLOGY August 1993 – July 1997 Associate Professor.	Taiwan, R. O. C.
	DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE SYRACUSE UNIVERSITY August 1992 – August 1993 Graduate Research Associate.	Syracuse, NY
	DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE SYRACUSE UNIVERSITY August 1989 – July 1992 Graduate Teaching Assistant.	Syracuse, NY
Professional Services	IEEE TAIPEI SECTION January 2007– December 2008 Chair of Educational Activities.	Taiwan, R. O. C.
	IEEE INFORMATION THEORY SOCIETY TAIPEI CHAPTER August 2005– July 2007 Chapter Chair.	Taiwan, R. O. C.
	JOURNAL OF INTERNET TECHNOLOGY 2001-present Editor.	
	INTERNATIONAL JOURNAL OF AD HOC AND UBIQUITOUS COMPUTING 2005-present Editor.	
	INTERNATIONAL JOURNAL OF DISTRIBUTED SENSOR NETWORKS 2010- May 2013 Editor.	
	THE FIRST IEEE INTERNATIONAL CONFERENCE ON WIRELESS AND MOBILE COMPUTING, NETWORKING AND COMMUNICATIONS 2005 Technical Program Committee member.	Montreal, Canada
	THE SECOND IEEE INTERNATIONAL CONFERENCE ON WIRELESS AND MOBILE COMPUTING, NETWORKING AND COMMUNICATIONS 2006 Technical Program Committee member.	Montreal, Canada
	THE IEEE INTERNATIONAL CONFERENCE ON SENSOR NETWORKS, UBIQUITOUS, AND TRUSTWORTHY COMPUTING 2006 Technical Program Committee member.	Taichung, Taiwan, R. O. C.

THE IEEE INTERNATIONAL WORKSHOP ON AD HOC,
UBIQUITOUS COMPUTING
2006
Co-Chair. Taichung, Taiwan, R. O. C.

INTERNATIONAL CONFERENCE ON ALGORITHMS, SYSTEMS, AND
APPLICATIONS OF WIRELESS NETWORK
2006 Xian, China
Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING
CONFERENCE 2007 (IEEE CCNC 2007): WIRELESS NETWORKING
TRACK
2007 Las Vegas, USA
Technical Program Committee member.

THE 2007 IFIP INTERNATIONAL CONFERENCE ON EMBEDDED AND
UBIQUITOUS COMPUTING
2007 Taipei, Taiwan, R. O. C.
Technical Program Committee member.

THE THIRD IEEE INTERNATIONAL CONFERENCE ON WIRELESS AND
MOBILE COMPUTING, NETWORKING AND COMMUNICATIONS
2007 New York City, USA
Technical Program Committee member.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE
(IEEE GLOBECOM 2007): MULTIMEDIA COMMUNICATIONS
SOFTWARE AND SERVICES SYMPOSIUM
2007 Washington, D.C., USA
Technical Program Committee member.

THE FIRST IEEE CONFERENCE ON WIRELESS RURAL AND EMERGENCY
COMMUNICATIONS (WRECOM 2007)
2007 Rome, Italy
Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING
CONFERENCE 2008 (IEEE CCNC 2008): NETWORK ACCESS AND
COMMUNICATIONS TRACK
2008 Las Vegas, USA
Technical Program Committee member.

THE 2008 IEEE INTERNATIONAL CONFERENCE ON
COMMUNICATIONS (IEEE ICC 2008): INFORMATION AND NETWORK
SECURITY SYMPOSIUM
2008 Beijing, China
Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING CONFERENCE
2009 (IEEE CCNC 2009): WIRELESS NETWORKING FOR CONSUMER
ELECTRONICS TRACK
2009 Las Vegas, USA
Technical Program Committee member.

THE 2009 IEEE INTERNATIONAL CONFERENCE ON
COMMUNICATIONS (IEEE ICC 2009): COMMUNICATION AND INFORMATION
SYSTEMS SECURITY SYMPOSIUM Dresden, Germany
2009

Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING CONFERENCE
2010 (IEEE CCNC 2010): SMART SPACES AND PERSONAL AREA
NETWORKS FOR CE TRACK Las Vegas, USA
2010

Technical Program Committee member.

THE INTERNATIONAL SYMPOSIUM ON INFORMATION THEORY AND ITS
APPLICATIONS 2010 (ISITA 2011) Taichung, Taiwan
2010

General Secretary.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING CONFERENCE
2011 (IEEE CCNC 2011): SMART SPACES AND PERSONAL AREA
NETWORKS FOR CE TRACK Las Vegas, USA
2011

Technical Program Committee member.

THE 2011 IEEE INTERNATIONAL CONFERENCE ON
COMMUNICATIONS (IEEE ICC 2011): COMMUNICATION AND INFORMATION
SYSTEMS SECURITY SYMPOSIUM Kyoto, Japan
2011

Technical Program Committee member.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE
(IEEE GLOBECOM 2012): COMMUNICATION AND INFORMATION
SYSTEMS SECURITY SYMPOSIUM Anaheim, CA, USA
2012

Technical Program Committee member.

THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID
COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012) Taitan, Taiwan, ROC
2012

Keynote/Panel Chair

THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID
COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012): SMART GRID
COMMUNICATION NETWORKS SYMPOSIUM Taitan, Taiwan, ROC
2012

Co-Chair.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE
(IEEE GLOBECOM 2013): COMMUNICATION AND INFORMATION
SYSTEMS SECURITY SYMPOSIUM Atlanta, USA
2013

Co-Chair.

THE 4TH IEEE INTERNATIONAL CONFERENCE ON SMART GRID
COMMUNICATIONS (IEEE SMARTGRIDCOMM 2013): SMART GRID

Program Committee member.

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY
SPECIAL SECTION ON VEHICULAR SOCIAL NETWORKS
2013

Guest Editor.

**Awards &
Honors**

- **2013, 2013 ACM CCS Test-of-Time Award**– Awarded by the ACM Special Interest Group on Security, Audit and Control (SIGSAC).¹
- 2012, *2012-2013 Senior Fulbright Research Grants*–Awarded by The Foundation for Scholarly Exchange (Fulbright Taiwan).
- 2011, *Chair Professor*–honored by National Taiwan University of Science and Technology, Taiwan, ROC.
- **2011, IEEE Fellow**–Elevated by Communication Society for contributions to Decoding Techniques.
- 2010, *Excellent Research Award*– Awarded by National Taiwan University of Science and Technology, Taiwan, ROC.
- 2007, *Outstanding Research Award*– Awarded by College of Electrical Engineering and Computer Science, National Taipei University, Taiwan, ROC.
- 2002-2004, *SUPRIA Visiting Research Scholarship* – Awarded by CASE center at Syracuse University, New York.
- 2000, *89-fiscal-year Research Award* – Awarded by National Science Council, Taiwan, ROC.
- 2000, *Research Award* – Awarded by National Chi Nan University, Taiwan, ROC.
- 1999, *88-fiscal-year Research Award* – Awarded by National Science Council, Taiwan, ROC.
- 1998, *87-fiscal-year Research Award* – Awarded by National Science Council, Taiwan, ROC.
- 1997, *86-fiscal-year Research Award* – Awarded by National Science Council, Taiwan, ROC.
- **1997, A paper was honored as long presentation at the 1997 IEEE International Symposium on Information theory.** ²
- **1994, Syracuse University Doctoral Prize of the Year 1994** – Awarded by Syracuse University.
- 1994, *83-fiscal-year Research Award* – Awarded by National Science Council, Taiwan, ROC.
- 1993, *82-fiscal-year Research Award for Young Researcher* – Awarded by National Science Council, Taiwan, ROC.
- **1993, A paper was honored as long presentation at the 1993 IEEE International Symposium on Information theory.**

**Professional
Memberships**

- **IEEE Fellow 2011**– Elevated by Communication Society for contributions to Decoding Techniques.

¹Each year, the ACM SIGSAC selects two papers published ten years ago in its flagship conference, the ACM Conference on Computer and Communications Security (CCS), to recognize their significant impacts on the security area. The ACM CCS is one of the best conferences in the security area.

²Only papers with the potential to have an impact on the state of the art of their respective research areas are accepted as long presentations. Usually there are only 17 of 580 accepted papers to be honored as long presentations.

Research Interests

- Wireless Networks– especially on the security, energy control, and analysis of sensor networks and ad hoc networks.
- Security– especially on the topics related to sensor networks and privacy-preserving.
- Coding Theory– especially on the development of the theory of decoding and the design of practical decoding algorithms for error-correcting codes.
- Wireless Communication– especially on the application and VLSI design of error-correcting codes.

Projects

- **National Nature Science Foundation of China**

1. **January 2017– December 2020** Two-Phase Maximum-likelihood Soft-decision Decoding for Linear Block codes, Principle Investigator.

- **National Science Council**

1. **August 2013– July 2016.** Research on Target Localization in Wireless Sensor Networks using Error Correcting Codes, Principle Investigator. (NSC)
2. **August 2012– July 2015.** The Study of Regenerating Codes for Distributed Storage Applications, Principle Investigator. (NSC)
3. **August 2010– July 2013.** Coding Theory Application on Fault-Tolerance and Privacy-Preserving for Cloud Computing, Principle Investigator. (NSC)
4. **August 2010– July 2011.** Study on Efficient Distributed Network Storage Based on Error Control Coding, Principle Investigator. (NSC)
5. **August 2007– July 2010.** Study on Soft-Decision Decoding for Tail-Biting Convolutional Codes, Principle Investigator. (NSC)
6. **August 2007– July 2010.** Using MDS Codes to Efficiently Establish Secure Channels for Wireless Sensor Networks, Principle Investigator. (NSC)
7. **August 2006– July 2007.** The Study of Key Exchange for Wireless Sensor Networks, Principle Investigator. (NSC)
8. **August 2005– July 2007.** The Study of Cyclic Redundancy Check Codes for Message Length Detection, Principle Investigator. (NSC)
9. **August 2004– July 2005.** The Study of Data Fusion in the Wireless Sensor Networks Using Coding Theory, Principle Investigator. (NSC)
10. **August 2003– July 2004.** WOFDM Down-Link Transmission Technology for 4G Wireless Communication System-Subproject 1: Coding Technology for WOFDM Transmission on Mobile Wireless Channel (3), Principle Investigator. (NSC)
11. **August 2002– July 2003.** Sequential Decoding and Generalized Fano Metric, Principle Investigator. (NSC)
12. **August 2001– July 2002.** WOFDM Down-Link Transmission Technology for 4G Wireless Communication System-Subproject 1: Coding Technology for WOFDM Transmission on Mobile Wireless Channel (1), Principle Investigator. (NSC)
13. **August 1999– July 2002.** Study of Medical Service system on Broadband Experimental Internet- Subproject 5: On the Study of the Secure Storage and Transmission of Multimedia Medical Information, Principle Investigator. (NSC)
14. **July 1999– June 2001.** Connection Project on Taiwan Academic Research Network-National Chi Nan University, Principle Investigator. (NSC)
15. **August 1999– July 2001.** A Geometric Searching Decoding Algorithm for Linear Block Codes, Principle Investigator. (NSC)
16. **August 1998– July 1999.** The Study of Maximum-Likelihood Soft-Decision Sequential Decoding for Convolutional Codes, Principle Investigator. (NSC)
17. **August 1997– July 1998.** The Study of Hard-Decision Decoding for Linear Block Codes, Principle Investigator. (NSC)

18. **August 1995– July 1996.** The Effect of Heuristic Information on the Soft-Decision Decoding for Linear Block Codes, Principle Investigator. (NSC)
19. **August 1994– July 1995.** The Study of Soft-Decision Decoding for Linear block Codes, Principle Investigator. (NSC)

- **Industry**

1. **December 2010– September 2011.** The Design of Combining BCH Decoder and CRC Checker for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
2. **August 2010– June 2011.** Design of Low Gate-Count LDPC Decoders for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
3. **November 2009– September 2010.** VLSI Design of Welch-Berlekamp Algorithm for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
4. **July 2009– May 2010.** Design of LDPC Codes for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
5. **November 2007– July 2008.** VLSI Design of AES, Principle Investigator. (**Solid State system**)
6. **August 2007– June 2008.** Design of Low Gate Count Error Control Codes for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
7. **August 2006– April 2007.** Design of Efficient Error Control Codes for Multilevel Flash Memories, Principle Investigator. (**Solid State system**)
8. **January 2006– January 2007.** Development of Error Correcting Algorithms for 3.5G HSDPA System, Principle Investigator. (**Sunplus**)

Publications

- **Book Chapters**

1. Y. S. Han and P.-N. Chen, “Sequential Decoding of Convolutional Codes,” *Encyclopedia of Telecommunications* (Editor: John Proakis), New York, Wiley, 2002, pp. 2140-2146.

- **Refereed papers**

1. Y. S. Han, T.-Y. Wu, P.-N. Chen, and P. K. Varshney, “A Low-Complexity Maximum-Likelihood Decoder for Tail-Biting Convolutional Codes,” *IEEE Trans. on Communications*, to appear. (**Full paper**)
2. C.-Y. Wei, H.-Y. Lin, P.-N. Chen, Y. S. Han, and P. K. Varshney, “Target Localization Using Sensor Location Knowledge in Wireless Sensor Networks,” *IEEE Wireless Communications Letters*, to appear.
3. C. Huang, T.-Y. Wu, P.-N. Chen, F. Alajaji, and Y. S. Han, “An Efficient Tree Search Algorithm for the Free Distance of Variable-Length Error-Correcting Codes,” *IEEE Communications Letters*, pp. 474-477, March, 2018.
4. H. Hou and Y. S. Han, “A New Construction and an Efficient Decoding Method for Rabin-Like Codes,” *IEEE Trans. on Communications*, pp. 521-533, February, 2018. (**Full paper**)
5. C.-Y. Wei, P.-N. Chen, Y. S. Han, and P. K. Varshney, “Local Threshold Design for Target Localization Using Error Correcting Codes in Wireless Sensor Networks in the Presence of Byzantine Attacks,” *IEEE Trans. on Information Forensics and Security*, pp. 1517-1584, July 2017. (**Full paper**)
6. M. A. Mulatu, L.-C. Chang, Y. S. Han, F. G. Mengistu, and D.-F. Tseng, “Threshold-Based Cooperative Communication of Energy Harvesting Active Networked Tags,” *Int. J. Ad Hoc and Ubiquitous Computing*, pp. 225-236, 24(4), 2017. (**Full paper**)
7. S.-J. Lin, T. Y. Al-Naffouri, Y. S. Han, and W.-H. Chung, “Novel Polynomial Basis with Fast Fourier Transform and Its Application to Reed-Solomon Erasure Codes,” *IEEE Trans. on Information Theory*, pp. 6284-6299, November, 2016. (**Full paper**)

8. S.-J. Lin, T. Y. Al-Naffouri, and Y. S. Han, “FFT Algorithm for Binary Extension Finite Fields and its Application to Reed-Solomon Codes,” *IEEE Trans. on Information Theory*, pp. 5343-5358, October, 2016. **(Full paper)**
9. J.-T. Tsai and Y. S. Han, “Geographic routing with enhanced local information for wireless networks,” *Journal of Information Science and Engineering*, pp. 1261-1288, September, 2016. **(Full paper)**
10. R. El-Bardan, E. Masazade, O. Ozdemir, Y. S. Han, and P. K. Varshney, “Permutation Trellis Coded Multi-level FSK Signaling to Mitigate Primary User Interference in Cognitive Radio Networks,” *IEEE Trans. on Communications*, pp. 104-116, January, 2016. **(Full paper)**
11. B. Kailkhura, Y. S. Han, S. Brahma, and P. K. Varshney, “Distributed Bayesian Detection in the Presence of Byzantine Data,” *IEEE Trans. on Signal Processing*, pp. 5250 - 5263, October, 2015. **(Full paper)**
12. B. Kailkhura, S. Brahma, B. Dulek, Y. S. Han, and P. K. Varshney, “Distributed Detection in Tree Networks: Byzantines and Mitigation Techniques,” *IEEE Trans. on Information Forensics and Security*, pp. 1499-1512, July, 2015. **(Full paper)**
13. Y. S. Han, H.-T. Pai, R. Zheng, and P. K. Varshney, “Update-Efficient Error-Correcting Product-Matrix Codes,” *IEEE Trans. on Communications*, pp. 1925-1938, June, 2015. **(Full paper)**
14. B. Kailkhura, Y. S. Han, S. Brahma, and P. K. Varshney, “Asymptotic Analysis of Distributed Bayesian Detection with Byzantine Data,” *IEEE Signal Processing Letters*, pp. 608-611, May, 2015.
15. S.-J. Lin, W.-H. Chung, Y. S. Han, and T. Y. Al-Naffouri, “A Unified Form of Exact-MSR Codes via Product-Matrix Frameworks,” *IEEE Trans. on Information Theory*, pp. 873-886, February, 2015. **(Full paper)**
16. D.-F. Tseng, F. G. Mengistu, Y. S. Han, M. A. Mulatu, L.-C. Chang, and T.-R. Tsai, “Robust Turbo Decoding in a Markov Gaussian Channel,” *IEEE Wireless Communications Letters*, pp. 633-636, December, 2014.
17. F. G. Mengistu, D.-F. Tseng, Y. S. Han, M. A. Mulatu, and L.-C. Chang, “A Robust Decoding Scheme for Convolutionally Coded Transmission Through a Markov Gaussian Channel,” *IEEE Trans. on Vehicular Technology*, pp. 4344-4356, November, 2014. **(Full paper)**
18. B. Kailkhura, S. Brahma, Y. S. Han, and P. K. Varshney, “Distributed Detection in Tree Topologies with Byzantines,” *IEEE Trans. on Signal Processing*, pp. 3208-3219, June, 2014. **(Full paper)**
19. V. S. S. Nadendla, Y. S. Han, and P. K. Varshney, “Distributed Inference with M -ary Quantized Data in the Presence of Byzantine Attacks,” *IEEE Trans. on Signal Processing*, pp. 2681-2695, May, 2014. **(Full paper)**
20. Y. S. Han, H.-T. Pai, R. Zheng, and W. H. Mow, “Efficient Exact Regenerating Codes for Byzantine Fault Tolerance in Distributed Networked Storage,” *IEEE Trans. on Communications*, pp. 385-397, February, 2014. **(Full paper)**
21. A. Vempaty, Y. S. Han, and P. K. Varshney, “Target Localization in Wireless Sensor Networks using Error Correcting Codes,” *IEEE Trans. on Information Theory*, pp. 697-712, January, 2014. **(Full paper)**
22. D.-F. Tseng, Y. S. Han, W. H. Mow, P.-N. Chen, J. Deng, and A. J. Han Vinck, “Robust Decoding for Convolutionally Coded Systems Impaired by Memoryless Impulsive Noise,” *IEEE Trans. on Communications*, pp. 4640 - 4652, November, 2013. **(Full paper)**
23. T.-Y. Wu, P.-N. Chen, F. Alajaji, and Y. S. Han, “On the Design of Variable-Length Error-Correcting Codes,” *IEEE Trans. on Communications*, pp. 3553-3565, September, 2013. **(Full paper)**

24. J. Deng and Y. S. Han, "Cooperative Secret Delivery in Wireless Sensor Networks," *Int. J. Ad Hoc and Ubiquitous Computing*, Vol. 14, No. 4, pp. 226-237, 2013. **(Full paper)**
25. Y. S. Han, S. Omiwade, and R. Zheng, "Progressive Data Retrieval for Distributed Networked Storage," *IEEE Trans. on Parallel and Distributed Systems*, pp. 2303-2314, December, 2012. **(Full paper)**
26. J. Deng, S. C.-H. Huang, and Y. S. Han, "An On-line Relay Selection Scheme in Power Controllable Wireless Sensor Networks," *International Journal of Distributed Sensor Networks*, Vol. 2012, Article ID 213598, 13 pages. **(Full paper)**
27. D.-F. Tseng, Y. S. Han, W. H. Mow, L.-C. Chang, and A. J. Han Vinck, "Robust Clipping for OFDM Transmissions over Memoryless Impulsive Noise Channels," *IEEE Communications Letters*, pp. 1110-1113, July, 2012.
28. Y. S. Han, T.-Y. Wu, H.-T. Pai and P.-N. Chen, "The Modified Wrap-Around Viterbi Algorithm for Convolutional Tail-Biting Codes," *Journal of the Chinese Institute of Engineers*, pp. 431-437, June, 2012. **(Full paper)**
29. T.-R. Tsai, D.-F. Tseng, Y. S. Han, and H.-T. Pai, "Improved EXIT Analysis for Turbo Decoding," *IEEE Communications Letters*, pp. 995-997, September. 2011.
30. H.-T. Pai, Y. S. Han, and Y.-J. Chu, "New HARQ Scheme Based on Decoding of Tail-biting Convolutional Codes in IEEE 802.16e," *IEEE Trans. on Vehicular Technology*, pp. 912-918, March, 2011. **(Full paper)**
31. S.-L. Shieh, P.-N. Chen, Y. S. Han, and T.-Y. Wu, "Early-Elimination Modification for Priority-First Search Decoding," *IEEE Trans. on Communications*, pp. 3459-3469, December, 2010. **(Full paper)**
32. Y.-M. Huang, T.-Y. Wu, and Y. S. Han, "An A*-based Algorithm for Constructing Reversible Variable Length Codes with Minimum Average Codeword Length," *IEEE Trans. on Communications*, pp. 3175-3185, November, 2010. **(Full paper)**
33. H.-T. Pai, J. Deng, and Y. S. Han, "Time-Slotted Voting Mechanism for Fusion Data Assurance in Wireless Sensor Networks Under Stealthy Attacks," *Computer Communications*, pp. 1524-1530, August, 2010. **(Full paper)**
34. C.-L. Wu, P.-N. Chen, Y. S. Han, and M.-H. Kuo, "Maximum-Likelihood Priority-First Search Decodable Codes for Combined Channel Estimation and Error Correction," *IEEE Trans. on Information Theory*, pp. 4191-4203, September 2009. **(Full paper)**
35. J. Deng, Y. S. Han, and S. R. Kulkarni, "Can Multiple Subchannels Improve the Delay Performance of RTS/CTS-based MAC Schemes?" *IEEE Trans. on Wireless Communications*, pp. 1591-1596, April, 2009.
36. H.-T. Pai, Y. S. Han, T.-Y. Wu, P.-N. Chen, and S.-L. Shieh, "Low-Complexity ML Decoding for Convolutional Tail-Biting Codes," *IEEE Communications Letters*, pp. 883-885, December, 2008.
37. S. C.-H. Huang, P.-J. Wan, J. Deng, and Y. S. Han, "Broadcast Scheduling in Interference Environment," *IEEE Trans. on Mobile Computing*, pp. 1338-1348. November, 2008. **(Full paper)**
38. C.-Y. Wang, P.-N. Chen, W.-T. Chen, S.-L. Shieh, and Y. S. Han, "An Efficient SNR Estimate Scheme for Turbo Decoder over Quasi-Static Channels," *International Journal of Electrical Engineering (IJE)*, pp. 261-268, 2008. **(Full paper)**
39. Y.-M. Huang, Y. S. Han, and T.-Y. Wu, "Soft-Decision Priority-First Decoding Algorithms for Variable-Length Error-Correcting Codes," *IEEE Communications Letters*, pp. 572-574, August, 2008.
40. J. Deng and Y. S. Han, "Multi-path Key Establishment for Wireless Sensor Networks Using Just Enough Redundancy Transmission," *IEEE Trans. on Dependable and Secure Computing*, pp. 177-190, July-September, 2008. **(Full paper)**

41. H.-T. Pai, Y. S. Han, and J.-T. Sung, "Two-Dimensional Coded Classification Schemes in Wireless Sensor Networks," *IEEE Trans. on Wireless Communications*, pp. 1450-1455, May, 2008.
42. H.-T. Pai and Y. S. Han, "Power-Efficient Direct-Voting Assurance for Data Fusion in Wireless Sensor Networks," *IEEE Trans. on Computers*, pp. 261-273, February, 2008. **(Full paper)**
43. J. Deng, Y. S. Han, P.-N. Chen, and P. K. Varshney, "Optimal Transmission Range for Wireless Ad Hoc Networks Based on Energy Efficiency," *IEEE Trans. on Communications*, pp. 1772-1782, September, 2007. **(Full paper)**
44. S.-L. Shieh, P.-N. Chen, and Y. S. Han, "Flip CRC Modification for Message Length Detection," *IEEE Trans. on Communications*, pp. 1747-1756, September, 2007. **(Full paper)**
45. H.-T. Pai, J.-T. Sung, and Y. S. Han, "Adaptive Retransmission with Balanced Load for Fault-Tolerant Distributed Detection in Wireless Sensor Networks," *Journal of Information Science and Engineering: special issue on Wireless Ad Hoc and Sensor Networks*, pp. 1141-1154, July, 2007. **(Full paper)**
46. C. Yao, P.-N. Chen, T.-Y. Wang, Y. S. Han, and P. K. Varshney, "Performance Analysis and Code Design for Minimum Hamming Distance Fusion in Wireless Sensor Networks," *IEEE Trans. on Information Theory*, pp. 1706-1715, May, 2007. **(Full paper)**
47. Y.-J. Chen, D.-R. Duh, and Y. S. Han, "An Improved Modulo $(2^n + 1)$ Multiplier for IDEA," *Journal of Information Science and Engineering*, pp. 911-923, March 2007.
48. C.-W. Chang, P.-N. Chen, and Y. S. Han, "A Systematic Bit-wise Decomposition of M-ary Symbol Metric," *IEEE Trans. on Wireless Communications*, pp. 2742-2751, October, 2006. **(Full paper)**
49. Y. S. Han, J. Deng, and Z. J. Haas, "Analyzing Multi-Channel Medium Access Control Schemes with ALOHA Reservation," *IEEE Trans. on Wireless Communications*, pp. 2143-2152, August, 2006. **(Full paper)**
50. T.-Y. Wang, Y. S. Han, B. Chen, and P. K. Varshney, "A Combined Decision Fusion and Channel Coding Scheme for Distributed Fault-Tolerant Classification in Wireless Sensor Networks," *IEEE Trans. on Wireless Communications*, pp. 1695-1705, July, 2006. **(Full paper)**
51. J. Deng, Y. S. Han, and Z. J. Haas, "Analyzing Split Channel Medium Access Control Schemes," *IEEE Trans. on Wireless Communications*, pp. 967-971, May, 2006.
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- **Patents**

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