

Yunghsiang S. Han
Shenzhen Institute for Advanced Study
University of Electronic Science and Technology of China
No. 1301-80 Guanguang Road Longhua district, Shenzhen, China
yunghsiangh@gmail.com

Education	SYRACUSE UNIVERSITY	Syracuse, NY
	• Ph.D. in Computer and Information Science (August 1993) – <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.	
	NATIONAL TSING HUA UNIVERSITY	Hsinchu
	• MS in Electrical Engineering (June 1986) • BS in Electrical Engineering (June 1984)	
	Professional Experience	
	SHENZHEN INSTITUTE FOR ADVANCED STUDY UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA June 2021 – Present Professor	Shenzhen
	THEORY LAB HUAWEI TECHNOLOGIES CO., LTD. March 2020 – March 2023 Founder of the Coding Theory Group	Hong Kong
	SCHOOL OF ELECTRICAL ENGINEERING & INTELLIGENTIZATION DONGGUAN UNIVERSITY OF TECHNOLOGY February 2017 – February 2021 Distinguished Professor	Dongguan
	DEPARTMENT OF ELECTRICAL ENGINEERING NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY June 2011 – January 2017 Chair Professor	Taipei
	COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE NATIONAL TAIPEI UNIVERSITY February 2015 – present Chair Professor in Science and Technology	Taipei
	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
DEPARTMENT OF COMPUTER SCIENCE UNIVERSITY OF HOUSTON June 2011 – July 2011 Visiting Scholar	Houston, TX
DEPARTMENT OF ELECTRICAL ENGINEERING NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY August 2010 – May 2011 Professor	Taipei
GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING NATIONAL TAIPEI UNIVERSITY August 2009 – July 2010 Professor and Chairperson	Taipei
GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING NATIONAL TAIPEI UNIVERSITY August 2008 – July 2009 Professor	Taipei
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING UNIVERSITY OF TEXAS AT AUSTIN August 2008 – June 2009 Visiting Scholar	Austin, TX
GRADUATE INSTITUTE OF COMMUNICATION ENGINEERING NATIONAL TAIPEI UNIVERSITY August 2004 – July 2008 Professor and Chairperson	Taipei
DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING NATIONAL CHI NAN UNIVERSITY August 1998 – July 2004 Professor	Puli
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
DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITY OF HAWAII AT MANOA June 2001 – October 2001 Visiting Scholar	Honolulu, HI

	DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING NATIONAL CHI NAN UNIVERSITY August 1998 – July 2001 The Head of the Computer and Network Center	Puli
	DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING NATIONAL CHI NAN UNIVERSITY August 1997 – July 1998 Associate Professor	Puli
	DEPARTMENT OF ELECTRONIC ENGINEERING HUA FAN COLLEGE OF HUMANITIES AND TECHNOLOGY September 1994 – July 1996 The Head of the Computer Center.	Taipei
	DEPARTMENT OF ELECTRONIC ENGINEERING HUA FAN COLLEGE OF HUMANITIES AND TECHNOLOGY August 1993 – July 1997 Associate Professor	Taipei
	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	
	IEEE INFORMATION THEORY SOCIETY TAIPEI CHAPTER August 2005– July 2007 Chapter Chair	
	JOURNAL OF INTERNET TECHNOLOGY 2001-2016 Editor	
	INTERNATIONAL JOURNAL OF AD HOC AND UBIQUITOUS COMPUTING 2005-2016 Editor	
	INTERNATIONAL JOURNAL OF DISTRIBUTED SENSOR NETWORKS 2010- May 2013 Editor.	
	THE IEEE INTERNATIONAL WORKSHOP ON AD HOC, UBIQUITOUS COMPUTING 2006 Co-Chair	Taichung

THE INTERNATIONAL SYMPOSIUM ON INFORMATION THEORY AND ITS APPLICATIONS 2010 (ISITA 2011) 2010 General Secretary	Taichung
THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012) 2012 Keynote/Panel Chair	Taitan
THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012): SMART GRID COMMUNICATION NETWORKS SYMPOSIUM 2012 Co-Chair	Taitan
IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE (IEEE GLOBECOM 2013): COMMUNICATION AND INFORMATION SYSTEMS SECURITY SYMPOSIUM 2013 Co-Chair	Atlanta, USA
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY SPECIAL SECTION ON VEHICULAR SOCIAL NETWORKS 2013 Guest Editor	
THE 9TH INTERNATIONAL WORKSHOP ON SIGNAL DESIGN AND ITS APPLICATIONS IN COMMUNICATIONS (IWSDA 2019) 2019 General Co-Chair	Dongguan

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.
- 2011, *Chair Professor*–honored by National Taiwan University of Science and Technology.
- **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.
- 2007, *Outstanding Research Award*– Awarded by College of Electrical Engineering and Computer Science, National Taipei University.
- 2002-2004, *SUPRIA Visiting Research Scholarship* – Awarded by the CASE Center at Syracuse University, New York.
- 2000, *89-fiscal-year Research Award* – Awarded by the National Science Council.
- 2000, *Research Award* – Awarded by National Chi Nan University.

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 security conferences.

- 1999, *88-fiscal-year Research Award* – Awarded by the National Science Council.
- 1998, *87-fiscal-year Research Award* – Awarded by the National Science Council.
- 1997, *86-fiscal-year Research Award* – Awarded by the National Science Council.
- **1997, A paper was honored as a 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 the National Science Council.
- 1993, *82-fiscal-year Research Award for Young Researcher* – Awarded by National Science Council.
- **1993, A paper was honored as a 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.

Research Interests

- Coding Theory– especially on the development of the theory of decoding and the design of practical decoding algorithms for error-correcting codes.
- AI for Coding Theory– especially on the development of machine learning applied to the design of practical decoding algorithms for error-correcting codes.
- 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.
- 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, Principal Investigator.
- **National Science Council**
 1. **August 2013– July 2016.** Research on Target Localization in Wireless Sensor Networks using Error Correcting Codes, Principal Investigator. (NSC)
 2. **August 2012– July 2015.** The Study of Regenerating Codes for Distributed Storage Applications, Principal Investigator. (NSC)
 3. **August 2010– July 2013.** Coding Theory Application on Fault-Tolerance and Privacy-Preserving for Cloud Computing, Principal Investigator. (NSC)
 4. **August 2010– July 2011.** Study on Efficient Distributed Network Storage Based on Error Control Coding, Principal Investigator. (NSC)
 5. **August 2007– July 2010.** Study on Soft-Decision Decoding for Tail-Biting Convolutional Codes, Principal Investigator. (NSC)
 6. **August 2007– July 2010.** Using MDS Codes to Efficiently Establish Secure Channels for Wireless Sensor Networks, Principal Investigator. (NSC)
 7. **August 2006– July 2007.** The Study of Key Exchange for Wireless Sensor Networks, Principal Investigator. (NSC)

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 the 580 accepted papers to be honored as long presentations.

8. **August 2005– July 2007.** The Study of Cyclic Redundancy Check Codes for Message Length Detection, Principal Investigator. (NSC)
9. **August 2004– July 2005.** The Study of Data Fusion in the Wireless Sensor Networks Using Coding Theory, Principal 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), Principal Investigator. (NSC)
11. **August 2002– July 2003.** Sequential Decoding and Generalized Fano Metric, Principal 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), Principal 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, Principal Investigator. (NSC)
14. **July 1999– June 2001.** Connection Project on Taiwan Academic Research Network-National Chi Nan University, Principal Investigator. (NSC)
15. **August 1999– July 2001.** A Geometric Searching Decoding Algorithm for Linear Block Codes, Principal Investigator. (NSC)
16. **August 1998– July 1999.** The Study of Maximum-Likelihood Soft-Decision Sequential Decoding for Convolutional Codes, Principal Investigator. (NSC)
17. **August 1997– July 1998.** The Study of Hard-Decision Decoding for Linear Block Codes, Principal Investigator. (NSC)
18. **August 1995– July 1996.** The Effect of Heuristic Information on the Soft-Decision Decoding for Linear Block Codes, Principal Investigator. (NSC)
19. **August 1994– July 1995.** The Study of Soft-Decision Decoding for Linear Block Codes, Principal Investigator. (NSC)

• Industry

1. **June 2025– November 2026.** The Fast Encoding/Decoding of Reed-Solomon Codes Based on FTT and RM Technology, Principal Investigator. (Huawei Technologies Co., Ltd.)
2. **September 2024– August 2025.** The Research on New Decoding Algorithms for BCH Codes, Principal Investigator. (Theo End (Shenzhen) Computing Technology Co., Ltd.)
3. **January 2024– January 2025.** The Research on Post-Quantum, Quantum Computing, and Advanced Data Compression, Principal Investigator. (Theo End (Shenzhen) Computing Technology Co., Ltd.)
4. **September 2023– August 2024.** The Design of Algorithms for En/Decryption and Storage Coding, Principal Investigator. (Theo End (Shenzhen) Computing Technology Co., Ltd.)
5. **February 2022– February 2023.** The BER Analysis on Concatenated Coding Scheme for High-Speed Ethernet, Principal Investigator. (Huawei Technologies Co., Ltd.)
6. **March 2020– March 2023.** The Research on Information Theory, Principal Investigator. (Huawei Technologies Co., Ltd.)
7. **December 2010– September 2011.** The Design of Combining BCH Decoder and CRC Checker for Multilevel Flash Memories, Principal Investigator. (Solid State system)
8. **August 2010– June 2011.** Design of Low-Gate-Count LDPC Decoders for Multilevel Flash Memories, Principal Investigator. (Solid State system)

9. **November 2009– September 2010.** VLSI Design of Welch-Berlekamp Algorithm for Multilevel Flash Memories, Principal Investigator. **(Solid State system)**
10. **July 2009– May 2010.** Design of LDPC Codes for Multilevel Flash Memories, Principal Investigator. **(Solid State system)**
11. **November 2007– July 2008.** VLSI Design of AES, Principal Investigator. **(Solid State system)**
12. **August 2007– June 2008.** Design of Low Gate Count Error Control Codes for Multilevel Flash Memories, Principal Investigator. **(Solid State system)**
13. **August 2006– April 2007.** Design of Efficient Error Control Codes for Multilevel Flash Memories, Principal Investigator. **(Solid State system)**
14. **January 2006– January 2007.** Development of Error-Correcting Algorithms for 3.5G HSDPA System, Principal 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. W. Yan and Y. S. Han, “The Construction of Near-Optimal Universal Coding of Integers,” *IEEE Trans. on Information Theory*, pp. 6240-6262, August, 2026. **(Full paper)**
2. N. Tang, Y. S. Han, C. Chen, and D. Pei, “Generalized Inverse Discrete Fourier Transform with Application to Goppa Codes,” *IEEE Trans. on Information Theory*, pp. 4719-4738, July, 2026. **(Full paper)**
3. C. Chen, S.-J. Lin, N. Tang, Y. S. Han, S. Cai, L. Yu, Z. Li, B. Bai, and B. Bai, “Two Fast Erasure Decoding Algorithms for Reed-Solomon Codes Based on LCH-FFT,” *IEEE Trans. on Information Theory*, pp. 3784 - 3798, June, 2026. **(Full paper)**
4. W. Yan, Y. S. Han, and G. Yang, “On Some Properties for Universal Coding of Integers and Its Generalization,” *IEEE Trans. on Communications*, pp. 8587-8596, May, 2025. **(Full paper)**
5. J. Li, H. Cai, X. Tang, Y. S. Han, B. Bai, and G. Zhang, “Vector Locally Repairable Codes With Small Repair Bandwidth and Small Sub-packetization Levels,” *IEEE Trans. on Communications*, pp. 2906-2920, May, 2025. **(Full paper)**
6. C. Chen, Y. S. Han, N. Tang, X. Ma, and B. Bai, “Parallel Welch-Berlekamp Algorithm,” *IEEE Trans. on Information Theory*, pp. 3473 - 3488, May 2025. **(Full paper)**
7. N. Wang, S. Xu, C. Qin, S.-J. Lin, S. Shao, and Y. S. Han, “High-Capacity Framework for Reversible Data Hiding Using Asymmetric Numeral Systems,” *IEEE Trans. on Knowledge and Data Engineering*, pp. 8447 - 8461, December, 2024. **(Full paper)**
8. L. Yu, S.-J. Lin, and Y. S. Han, “A Class of Rateless Reed-Solomon Codes with Near-Linear Computational Complexities,” *IEEE Trans. on Communications*, pp. 6677 - 6687, November, 2024. **(Full paper)**
9. L. Yu, Y. S. Han, J. Yuan, and Z. Zhang, “Variant Codes Based on A Special Polynomial Ring and Their Fast Computations,” *IEEE Trans. on Communications*, pp. 5255 - 5267, September, 2024. **(Full paper)**
10. W. Yan and Y. S. Han, “Generalized Universal Coding of Integers,” *IEEE Trans. on Communications*, pp. 4538 - 4550, August, 2024. **(Full paper)**
11. L. Yu and Y. S. Han, “Construction of Reed-Solomon Erasure Codes with Four Parities Based on Systematic Vandermonde Matrices,” *IEEE Trans. on Computers*, pp. 1875-1882, July, 2024.

12. Z. Li, W. H. Mow, Y. S. Han, and T.-Y. Wu, "Generalization of Minimum Storage Regenerating Codes for Heterogeneous Distributed Storage Systems," *IEEE Trans. on Information Theory*, pp. 4022 - 4043, June, 2024. **(Full paper)**
13. N. Tang, C. Chen, and Y. S. Han, "Fast Error and Erasure Decoding Algorithm for Reed-Solomon Codes," *IEEE Communications Letters*, pp. 759-762, April, 2024.
14. C. Quan, Y. S. Han, B. Geng, and P. K. Varshney, "Distributed Quantized Detection of Sparse Signals Under Byzantine Attacks," *IEEE Trans. on Signal Processing*, pp. 57-69, January, 2024. **(Full paper)**
15. N. Wang, W. Yan, H. Jiang, S.-J. Lin, and Y. S. Han, "Prefix Coding Scheme Supporting Direct Access without Auxiliary Space," *IEEE Trans. on Knowledge and Data Engineering*, pp. 12917-12931, December, 2023. **(Full paper)**
16. J. Li, Y. Liu, X. Tang, Y. S. Han, B. Bai and G. Zhang, "MDS Array Codes With (Near) Optimal Repair Bandwidth for All Admissible Repair Degrees," *IEEE Trans. on Communications*, pp. 5633 - 5646, October, 2023. **(Full paper)**
17. C. Quan, S. Bulusu, B. Geng, Y. S. Han, N. Sriranga and P. K. Varshney, "On Ordered Transmission based Distributed Gaussian Shift-in-Mean Detection under Byzantine Attacks," *IEEE Trans. on Signal Processing*, pp. 3343 - 3356, September, 2023. **(Full paper)**
18. W. Yan, S.-J. Lin, and Y. S. Han, "A New Metric and the Construction for Evolving 2-Threshold Secret Sharing Schemes Based on Prefix Coding of Integers," *IEEE Trans. on Communications*, pp. 2906-2915, May, 2023. **(Full paper)**
19. J. Rui, Q. Huang, Y. S. Han, and T.-Y. Wu, "Optimal Busy-Node Repair of $(k+4, k, 4)$ MDS Codes with Small Sub-packetization Level," *IEEE Communications Letters*, pp. 1080-1084, April, 2023.
20. J. Li, X. Tang, H. Hou, Y. S. Han, B. Bai, and G. Zhang, "PMDS Array Codes with Small Sub-packetization, Small Repair Bandwidth/Rebuilding Access," *IEEE Trans. on Information Theory*, pp. 1551-1566. March, 2023. **(Full paper)**
21. C. Quan, N. Sriranga, H. Yang, Y. S. Han, B. Geng, and P. K. Varshney, "Efficient Ordered-Transmission Based Distributed Detection under Data Falsification Attacks," *IEEE Signal Processing Letters*, pp. 145-149, February, 2023.
22. H. Hou, Y. S. Han, P. P. C. Lee, Y. Wu, G. Han, and M. Blaum, "A Generalization of Array Codes with Local Properties and Efficient Encoding/Decoding," *IEEE Trans. on Information Theory*, pp. 107-125, January, 2023. **(Full paper)**
23. N. Tang and Y. S. Han, "A New Decoding Method for ReedSolomon Codes Based on FFT and Modular Approach," *IEEE Trans. on Communications*, pp. 7790-7801, December, 2022. **(Full paper)**
24. L.-H. Chang, P.-N. Chen, F. Alajaji, and Y. S. Han, "Decoder Ties Do Not Affect the Error Exponent of the Memoryless Binary Symmetric Channel," *IEEE Trans. on Information Theory*, pp. 3501-3510, June, 2022. **(Full paper)**
25. C. Quan, B. Geng, Y. S. Han, and P. K. Varshney, "Enhanced Audit Bit Based Distributed Bayesian Detection in the Presence of Strategic Attacks," *IEEE Transactions on Signal and Information Processing over Networks*, pp. 49 - 62, January, 2022. **(Full paper)**
26. Z. Li, S.-J. Lin, P.-N. Chen, Y. S. Han, and H. Hou, "Update Bandwidth for Distributed Storage," *IEEE Trans. on Information Theory*, pp. 7159-7179, November, 2021. **(Full paper)**
27. L. Deng, Y. Yu, Y. Zhang and Y. S. Han, "Comparing Delay-Constrained ALOHA and CSMA: A Learning-Based Low-Complexity Approximate Approach," *IEEE Open Journal of the Communications Society*, vol. 2, pp. 1721-1735, 2021. **(Full paper)**
28. Y. S. Han, C. Chen, S.-J. Lin, and B. Bai, "On Fast Fourier Transform-Based Decoding of Reed-Solomon Codes," *Int. J. Ad Hoc and Ubiquitous Computing*, pp. 180-187, 36(3), 2021. **(Invited paper)**

29. N. Wang, S.-J. Lin, Y. S. Han, and N. Yu, "Variants of Golomb Coding and the n -ary Versions," *IEEE Trans. on Communications*, pp. 7460-7472, December, 2020. **(Full paper)**
30. H. Hou, Y. S. Han, and P. C. C. Lee, "Two Classes of Binary MDS Array Codes with Asymptotically Optimal Repair for Any Single Column," *IEEE Trans. on Communications*, pp. 6723-6736, November, 2020. **(Full paper)**
31. H. Hou, P. C. C. Lee, and Y. S. Han, "Zigzag-Decodable Reconstruction Codes with Asymptotically Optimal Repair for All Nodes," *IEEE Trans. on Communications*, pp. 5999-6011, October, 2020. **(Full paper)**
32. H.-Y. Lin, P.-N. Chen, Y. S. Han, and P. K. Varshney, "Minimum Byzantine Effort for Blinding Distributed Detection in Wireless Sensor Networks," *IEEE Trans. on Signal Processing*, pp. 647-661, 2020. **(Full paper)**
33. L. Yu, Z. Lin, S.-J. Lin, Y. S. Han, and N. Yu, "Fast Encoding Algorithms for Reed-Solomon Codes with between Four and Seven Parity Symbols," *IEEE Trans. on Computers*, pp. 699-705, May, 2020.
34. H. Hou, Y. S. Han, P. C. C. Lee, Y. Hu, and H. Li, "A New Design of Binary MDS Array Codes with Asymptotically Weak-Optimal Repair," *IEEE Trans. on Information Theory*, pp. 7095-7113, November, 2019. **(Full paper)**
35. S.-J. Lin, Y. S. Han, and N. Yu, "New Locally Correctable Codes Based on Projective Reed-Muller Codes," *IEEE Trans. on Communications*, pp. 3834-3841, June, 2019. **(Full paper)**
36. L.-H. Chang, P.-N. Chen, V. Y. F. Tan, C. Wang, and Y. S. Han, "On the Maximum Size of Block Codes Subject to a Distance Criterion," *IEEE Trans. on Information Theory*, pp. 3751-3757, June, 2019. **(Full paper)**
37. H. Cao, S.-J. Lin, W. Zhang, and Y. S. Han, "On the Security of Secret Sharing over a Ring and the Fast Implementation," *IEEE Signal Processing Letters*, pp. 705-709, May, 2019.
38. C. Chen, S.-J. Lin, and Y. S. Han, "Extended Versions of Polynomial Remainder Codes and Chinese Remainder Codes," *IEEE Communications Letters*, pp. 2407-2410, December, 2018.
39. L. Deng, W. S. Wong, P.-N. Chen, Y. S. Han, and H. Hou, "Delay-Constrained Input-Queued Switch," *IEEE Journal on Selected Areas in Communications (JSAC): special issue on Emerging Technologies in Tactile Internet and Backhaul/Fronthaul networks*, pp. 2464-2474, November, 2018. **(Full paper)**
40. H. Hou, Y. S. Han, K. W. Shum, and H. Li, "A Unified Form of EVENODD and RDP Codes and Their Efficient Decoding," *IEEE Trans. on Communications*, pp. 5053 - 5066, November, 2018. **(Full paper)**
41. H. Hou and Y. S. Han, "A Class of Binary MDS Array Codes with Asymptotically Weak-Optimal Repair," *SCIENCE CHINA Information Sciences*, pp. 100302:1100302:11, October, 2018. **(Invited paper)**
42. 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*, pp. 456-459, July, 2018.
43. 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*, pp. 1859-1870, May, 2018. **(Full paper)**
44. 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.
45. 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)**

46. 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)**
47. 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)**
48. 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)**
49. 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)**
50. 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)**
51. 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)**
52. 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)**
53. 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)**
54. 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)**
55. 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.
56. 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)**
57. 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.
58. 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)**
59. 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)**
60. 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)**
61. 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)**

62. 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)**
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