

**Yunghsiang S. Han**  
Shenzhen Institute for Advanced Study  
University of Electronic Science and Technology of China  
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<b>Education</b>	<p>SYRACUSE UNIVERSITY <span style="float: right;">Syracuse, NY</span></p> <ul style="list-style-type: none"><li>• Ph.D. in Computer and Information Science <span style="float: right;">(August 1993)</span><ul style="list-style-type: none"><li>– <i>Dissertation Topic: Efficient Soft-Decision Decoding Algorithms for Linear Block Codes Using Algorithm A*</i>.</li><li>– <b>Winner of Syracuse University Doctoral Prize of the Year 1994.</b></li></ul></li></ul> <p>NATIONAL TSING HUA UNIVERSITY <span style="float: right;">Hsinchu, Taiwan, R. O. C.</span></p> <ul style="list-style-type: none"><li>• MS in Electrical Engineering <span style="float: right;">(June 1986)</span></li><li>• BS in Electrical Engineering <span style="float: right;">(June 1984)</span></li></ul>
<b>Professional Experience</b>	<p>SHENZHEN INSTITUTE FOR ADVANCED STUDY UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA <span style="float: right;">Shenzhen, China</span> June 2021 – Present <b>Professor</b></p> <p>THEORY LAB HUAWEI TECHNOLOGIES CO., LTD. <span style="float: right;">Hong Kong</span> March 2020 – Present <b>Consultant</b></p> <p>SCHOOL OF ELECTRICAL ENGINEERING &amp; INTELLIGENTIZATION DONGGUAN UNIVERSITY OF TECHNOLOGY <span style="float: right;">Dongguan, China</span> February 2017 – February 2021 <b>Distinguished Professor</b></p> <p>DEPARTMENT OF ELECTRICAL ENGINEERING NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY <span style="float: right;">Taiwan, R. O. C.</span> June 2011 – January 2017 <b>Chair Professor.</b></p> <p>COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE NATIONAL TAIPEI UNIVERSITY <span style="float: right;">Taiwan, R. O. C.</span> February 2015 – present <b>Chair Professor in Science and Technology.</b></p> <p>INSTITUTE OF NETWORK CODING THE CHINESE UNIVERSITY OF HONG KONG <span style="float: right;">Hong Kong</span> June 2014 – September 2014 January 2015 – February 2015 Visiting Scholar.</p>

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
<b>Professional Services</b>	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 Montreal, Canada  
2006

Technical Program Committee member.

THE IEEE INTERNATIONAL CONFERENCE ON SENSOR  
NETWORKS, UBIQUITOUS, AND TRUSTWORTHY COMPUTING Taichung, Taiwan, R. O. C.  
2006

Technical Program Committee member.

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

Co-Chair.

INTERNATIONAL CONFERENCE ON ALGORITHMS, SYSTEMS, AND  
APPLICATIONS OF WIRELESS NETWORK Xian, China  
2006

Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING  
CONFERENCE 2007 (IEEE CCNC 2007): WIRELESS NETWORKING  
TRACK Las Vegas, USA  
2007

Technical Program Committee member.

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

Technical Program Committee member.

THE THIRD IEEE INTERNATIONAL CONFERENCE ON WIRELESS AND  
MOBILE COMPUTING, NETWORKING AND COMMUNICATIONS New York City, USA  
2007

Technical Program Committee member.

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

Technical Program Committee member.

THE FIRST IEEE CONFERENCE ON WIRELESS RURAL AND EMERGENCY  
COMMUNICATIONS (WRECOM 2007) Rome, Italy  
2007

Technical Program Committee member.

THE IEEE CONSUMER COMMUNICATIONS AND NETWORKING  
CONFERENCE 2008 (IEEE CCNC 2008): NETWORK ACCESS AND  
COMMUNICATIONS TRACK Las Vegas, USA  
2008

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  
2009  
Dresden, Germany  
Technical Program Committee member.

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

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

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

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

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE  
(IEEE GLOBECOM 2012): COMMUNICATION AND INFORMATION  
SYSTEMS SECURITY SYMPOSIUM  
2012  
Anaheim, CA, USA  
Technical Program Committee member.

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

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

Co-Chair.

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

Atlanta, USA

Co-Chair.

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

Vancouver, BC, Canada

Program Committee member.

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

Guest Editor.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE  
(IEEE GLOBECOM 2015): COMMUNICATION AND INFORMATION  
SYSTEMS SECURITY SYMPOSIUM  
2015

San Diego, CA, USA

Technical Program Committee member.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE  
(IEEE GLOBECOM 2017): MOBILE AND WIRELESS  
NETWORKS SYMPOSIUM  
2017

Singapore

Technical Program Committee member.

IEEE INFORMATION THEORY WORKSHOP  
(IEEE ITW 2017)  
2017

Kaohsiung, Taiwan

Technical Program Committee member.

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE  
(IEEE GLOBECOM 2018): MOBILE AND WIRELESS  
NETWORKS SYMPOSIUM  
2018

Abu Dhabi, UAE

Technical Program Committee member.

THE 2019 IEEE INTERNATIONAL CONFERENCE ON  
COMMUNICATIONS (IEEE ICC 2019): COMMUNICATION AND INFORMATION  
SYSTEMS SECURITY SYMPOSIUM  
2019

Shanghai, China

Technical Program Committee member.

THE 9TH INTERNATIONAL WORKSHOP ON SIGNAL DESIGN AND ITS  
APPLICATIONS IN COMMUNICATIONS (IWSDA 2019)  
2019

Dongguan, China

General Co-Chair.

THE 2020 IEEE INTERNATIONAL CONFERENCE ON  
COMMUNICATIONS (IEEE ICC 2020): COMMUNICATION AND INFORMATION

Technical Program Committee member.

**Awards &  
Honors**

- **2013, 2013 ACM CCS Test-of-Time Award**– Awarded by the ACM Special Interest Group on Security, Audit and Control (SIGSAC).<sup>1</sup>
- 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.** <sup>2</sup>
- **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**.

**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.

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<sup>1</sup>Each 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.

<sup>2</sup>Only 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.

- 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. 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*, to appear. **(Full paper)**
2. 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*, to appear.
3. 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)**
4. 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.
5. 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)**
6. 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)**
7. 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)**
8. 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)**
9. 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)**

10. 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)**
11. 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)**
12. 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)**
13. 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)**
14. 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)**
15. 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)**
16. 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.
17. 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)**
18. 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)**
19. 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)**
20. 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.
21. 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.
22. 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)**
23. 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)**
24. 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)**
25. 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.
26. 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)**

27. 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.
28. 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)**
29. 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)**
30. 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)**
31. 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)**
32. 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)**
33. 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)**
34. 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)**
35. 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)**
36. 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)**
37. 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)**
38. 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.
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