Chong-Yung Chi

Professor, Institute of Communications Engineering &
Department of Electrical Engineering
National Tsing-Hua University, Hsinchu, Taiwan 30013
Tel: +886 3 5731156, Fax: +886 3 5751787
E-mail: cychi@ee.nthu.edu.tw
http://www.ee.nthu.edu.tw/cychi/

EDUCATION:

Ph. D.   University of Southern California, Los Angeles, CA, Electrical Engineering, 1983
MS   National Taiwan University, Taipei, Taiwan, Electrical Engineering, 1977
BS   Tatung Institute of Technology, Taipei, Taiwan, Electrical Engineering, 1975

RESEARCH INTERESTS: **Google Scholar**

Wireless Communications:
Convex analysis and optimization for wireless communications and networking, multiple-input multiple-output (MIMO) transmit beamforming, distributed and coordinated communications, resource allocation and interference management for heterogeneous networks.

Signal Processing:
Convex analysis and optimization for blind signal processing, blind separation of non-negative dependent sources, hyperspectral image analysis, graph-based learning, and data security and privacy protection in machine learning.

PROFESSIONAL EXPERIENCE:

8/02 ~7/05   Chairman, Institute of Communications Engineering, National Tsing Hua University (NTHU), Hsinchu, Taiwan
8/99 ~present Professor, Institute of Communications Engineering, NTHU, Hsinchu, Taiwan
8/89 ~present Professor, Department of Electrical Engineering, NTHU, Hsinchu, Taiwan
10/88 ~7/89   Visiting Specialist, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan
7/83 ~9/88   Member of Technical Staff, Jet Propulsion Laboratory (JPL), Pasadena, California

PROFESSIONAL ACHIEVEMENTS & HONORS:

I. Society Membership

- **Member** of the National Academy of Artificial Intelligence **(2025 NAAI Member)**
- **Fellow** of the International Artificial Intelligence Industry Alliance **(2024 AIIA Fellow)**
- **Fellow** of the Asia-Pacific Artificial Intelligence Association **(2022 AAIA Fellow)**
- **Fellow** of the Institute of Electrical and Electronics Engineers **(2020 IEEE Fellow)** for contributions to *convex analysis and optimization for blind source separation*
- **Active member** of the Chinese Institute of Electrical Engineering

II. Journal Editor

1/12 ~12/15 Associate Editor of IEEE Trans. Signal Processing
6/06 ~5/10   Associate Editor of IEEE Signal Processing Letters
1/08 ~12/09 Associate Editor of IEEE Trans. Circuits and Systems I
6/05 ~5/08   Member of Editorial Board of Elsevier Signal Processing

1/06 ~12/07   Associate Editor of IEEE Trans. Circuits and Systems II
5/01 ~4/06   Associate Editor of IEEE Trans. Signal Processing
7/03 ~12/05   Editorial Board Member of JASP (The EURASIP)
2006   Guest Editor, JASP special issue, "Multisensor Processing for Signal Extraction and Applications"

III. Conference Chair/Technical Program Committee (TPC) Member/ Society Technical Committee Member

2025   Conference Chair, 2025 International Conference on Generative Artificial Intelligence and Digital Media (GADM 2025)

2025   Conference Chair, 2025 International Conference on Educational Technology and Artificial Intelligence (ETAIC 2025)

2025   Conference Chair, 2025 5th International Conference on Communication Technology and Information Technology (ICCTIT 2025)

2025   Conference Chair, 2025 5th Asia Symposium on Signal Processing (ASSP 2025)

2024   TPC member, IEEE International Conference on Communications (ICC-2024)-SPC Symposium: Signal Processing for Communications Symposium

2023   TPC member, IEEE International Conference on Frontiers of Signal Processing (ICFSP-2023).

2023   General Co-Chair, Asia Conference on Communications, Signal Processing and Information Technology (CSPIT-2023).

2023   TPC member, IEEE International Conference on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2023).

2023   General Chair, 5th International Conference on Communications, Information System and Computer Engineering (CISCE-2023).

2023   TPC member, IEEE International Conference on Communications (ICC-2023): Signal Processing for Communications Symposium.

2022   General Chair, International Conference on Intelligent Transportation and Smart Cities (ITSC-2022).

2022   Chair, 2nd International Conference on Digital Management, Information Systems and Technologies (DMIST-2022).

2022   TPC member, IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2022).

2022   TPC member, IEEE International Conference on Communications (ICC-2022).

2021   TPC member, IEEE International Conference on Communications (ICC-2021).

2021   Program Chair of 2021 3rd International Conference on Advances in Computer Technology, Information Science and Communications (CTISC-2021).

2020   TPC member, IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2020).

2020   TPC member, IEEE International Conference on Communications (ICC-2020).

2019   TPC member, IEEE International Conference on Communications (ICC-2019).

2013~2018   *Sensor Array and Multichannel Technical Committee (SAM-TC) Member, IEEE Signal Processing Society.*

2018   TPC Member, 2018 IEEE Seventh International Conference on Communications and Electronics (IEEE ICCE-2018).

2018   TPC Member, IEEE International Conference on Communications (ICC-2018).

2018   TPC Member, 26th European Signal Processing Conference (EUSIPCO-2018).

2018   TPC Member, 10th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2018).

2018   TPC Member, 2018 International Conference on Sensor Networks and Signal Processing (SNSP-2018).

2017   TPC Member, 22nd International Conference on Digital Signal Processing (DSP-2017).

2017   TPC Member, 2017 IEEE Information Theory Workshop (ITW-2017).

2017   TPC Member, IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2017).

2011~2016	*Signal Processing for Communications and Networking Technical Committee (SPCOM-TC) Member, IEEE Signal Processing Society.*
2016	TPC Member, IEEE Global Conference on Signal and Information Processing (GlobalSIP-2016).
2016	TPC Member, IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB-2016).
2016	TPC Member, 2016 IEEE 17th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2016).
2016	Area Chair of Track *Sensor Array, Multichannel and Communication Signal Processing*, 2016 European Signal Processing Conference (EUSIPCO-2016).
2015	TPC Member, IEEE Global Conference on Signal and Information Processing (GlobalSIP-2015).
2015	TPC Member, IEEE International Conference on Communications - Signal Processing for Communications Symposium (ICC'15 (05) SPC).
2015	TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2015).
2014	TPC Member, IEEE International Conference on Communications - Communication Theory Symposium (ICC'15 (04) CTS).
2014	TPC Member, Globecom 2014 - Signal Processing for Communications Symposium.
2014	TPC Member, IEEE Sensor Array and Multichannel Signal Processing (SAM) Workshop 2014.
2014	TPC Member, IEEE/CIC ICCC 2014 Symposium on Signal Processing for Communications.
2014	TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2014).
2013	TPC Member, Signal Processing for Communications (SPC) Symposium, ChinaCOM 2013.
2013	TPC Member, 2nd IEEE/CIC International Conference on Communications in China: Signal Processing for Communications (ICCC 2013-SPC Symposium).
2013	TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2013).
2012	TPC Member, IEEE International Conference on Information and Automation & International Symposium on Biomedical Engineering (ICIA-2012).
2012	TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2012).
2012	TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'12).
2011	*Track Chair* for MIMO, Signal Processing, and Smart in Antennas, 2011 IEEE Radio and Wireless Symposium in Radio and Wireless Week (RWW) 2011.
2011	TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'11).
2011	TPC Member, IEEE International Conference on Communication Technology (ICCT'2011).
2011	TPC Member, European Conference on Signal Processing (EUSIPCO-2011).
2011	TPC Member, The International Conference on Wireless Communications and Signal Processing (WCSP-2011).
2010	TPC Member, European Conference on Signal Processing (EUSIPCO-2010).
2005~2010	*Signal Processing Theory and Methods Technical Committee (SPTM-TC), IEEE Signal Processing Society.*
2010	TPC Member, Wireless Communications and Signal Processing (WCSP) track at the 19th International Conference on Computer Communications and Networks (ICCCN-2010).
2010	TPC Member of The International Conference on Wireless Communications and Signal Processing (WCSP-2010).
2010	TPC Member of APSIPA Annual Summit Conference 2010 "Wireless Communications & Networking" Track.
2009	*Lead Co-Chair* of Signal Processing for Communications (SPC) Symposium, ChinaCOM 2009.
2009	TPC Member of The International Conference on Wireless Communications and

Signal Processing (WCSP-2009).

2009	TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'09).
2009	TPC Member of Third IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2009).
2009	TPC Member, European Conference on Signal Processing (EUSIPCO-2009).
2009	Wireless Communications and Signal Processing (WCSP) track at the 18th International Conference on Computer Communications and Networks (ICCCN-2009).
2008	***Co-Chair*** of **SPC** Symposium, ChinaCOM 2008.
2008	TPC Member, EUSIPCO 2008.
2007	TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'07).
2007	TPC Member, 2007 Sixth International Conference on Information, Communications and Signal Processing (ICICS-2007).
2007	TPC Member of Second IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2007).
2006	TPC Member, IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'06).
2006	TPC Member of the ICC 2006 Wireless and Ad-Hoc Sensor Networks.
2006	Member of International Program Committee and Program Committee of the 6th International Symposium on Independent Component Analysis and Blind Source Separation (ICA-2006).
2006	TPC Member of 2006 International Wireless Communications and Computing Conference (IWCCC-2006).
2005	TPC Member of First IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2005).
2005	TPC Member of Emerging Networks, Technologies & Standards Symposium, IEEE WirelessCom 2005.
2005	Track TPC Member of 2005 International Conference on Communications, Circuits and Systems (ICCCAS-2005).
2004	Technical Committee Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2004).
2003	Program Committee Member, International Conference on Signal Processing (ICSP-2003).
2003	Member of International Program Committee of the 4th International Symposium on Independent Component Analysis and Blind Source Separation (ICA-2003).
2003	Technical Committee Member, IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'03).
7/01~6/03	Chair of Information Theory Chapter of IEEE Taipei Section.
2001	***Co-organizer and a general co-chairman*** of 2001 IEEE SP Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2001).
2001	Member of International Advisory Committee of TENCON'01.
2001	TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'01).
1999	Technical Committee Member, IEEE Signal Processing Workshop on Higher-Order Statistics (HOS'99).
1997	Technical Committee Member, IEEE Signal Processing Workshop on Higher-Order Statistics (HOS'97).

IV. Honors

- *國立清華大學電機工程學系榮譽退休教授(111 年 8 月起）*
- *科技部109年度「傑出研究獎」*
- *中國電機工程學會109年度傑出電機工程教授獎*
- *MOST Young Scholar Fellowship under Einstein Program:* **Chia-Hsiang Lin** (one of my former PhD students), Assistant Professor National Cheng Kung University (NCKU), Principal Investigator, Advanced Blind Source Separation and Hyperspectral Super-resolution Imaging via Convex Geometry and Big Data Optimization, from Aug. 2018 to July 2023.
- *2018 IEEE Signal Processing Society Best Paper Award:* **Kun-Yu Wang**, Anthony Man-Cho So,

Tsung-Hui Chang, Wing-Kin Ma, and **Chong-Yung Chi**, "Outage Constrained Robust Transmit Optimization for Multiuser MISO Downlinks: Tractable Approximations by Conic Optimization," IEEE Trans. Signal Processing, Vol. 62, No. 21, November 2014.

- *Best PhD Dissertation Award of IEEE/GRS-S (2016):* **Chia-Hsiang Lin** (one of my former Ph.D. students) won the best doctoral dissertation award of IEEE Geoscience and Remote Sensing Society (GRSS) Taipei Chapter for the PhD dissertation, "Simplex geometry based non-negative blind source separation," conferred in IEEE ICSANE, Nov. 2016.

- *Outstanding PhD Dissertation Award of IPPR/CVGIP (2016):* **Chia-Hsiang Lin** (one of my former Ph.D. students) won the outstanding doctoral dissertation award of IPPR/CVGIP for the PhD dissertation, "Simplex geometry based non-negative blind source separation," conferred in IPPR/CVGIP, August 2016.

- *IEEE Geoscience and Remote Sensing Society Taipei Chapter Best Thesis Award for 2013:* **ArulMurugan Ambikapathi** (one of my former Ph.D. students) won the best thesis award for his Ph.D. thesis, "Chance constrained robust unmixing algorithms and estimation of number of endmembers in hyperspectral images."

- *Best Poster Award:* **Wei-Chiang Li**, Tsung-Hui Chang, Che Lin and **Chong-Yung Chi**, "Outage constrained distributed multicell coordinated beamforming: A dynamic pricing scheme," presented in International Workshop on Mathematical Issues in Information Sciences (MIIS), Xi'an, China, July 7-13, 2012.

- *Best Paper Award:* **Tsung-Han Chan**, Wing-Kin Ma, Arulmurugan Ambikapathi and **Chong-Yung Chi**, "Robust endmember extraction using worst-case simplex volume maximization," in Proc. Third IEEE Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS), Lisbon, Portugal, June 6-9, 2011.

- *Outstanding Doctoral Dissertation Award of IPPR (2010):* **Tsung-Han Chan** (one of my former Ph.D. students) won the outstanding doctoral dissertation award of IPPR for the paper: "Convex analysis based non-negative blind source separation for biomedical and hyperspectral image analysis" in IPPR, 2010.

- *Best Doctoral Dissertation Award of CID & ORSTW (2010):* **Tsung-Han Chan** (one of my former Ph.D. students) won the best doctoral dissertation award of CID & ORSTW for the paper: "Convex analysis based non-negative blind source separation for biomedical and hyperspectral image analysis," in CID & ORSTW, 2010.

- *Best Student Paper Award:* **Chun-Hsien Peng** (one of my former Ph.D. students) won the best student paper award for the paper: Chun-Hsien Peng, **Chong-Yung Chi**, I-Chieh Chang and Chia-Hsing Kuo, "A blind space-time decoding algorithm by Kurtosis maximization for the down-link of MC-CDMA systems," 2005 IEEE International Conference on Information, Communications and Signal Processing (ICICS-2005), Bangkok, Thailand, Dec. 6-9, Dec. 2005.

- *NSC Class A Research Award 2005:* (within top 3% in Signal Processing Community in Taiwan)

V. Invited Plenary Talks at International Workshops/ Symposia/ Conferences

- *2025 5th International Conference on Artificial Intelligence, Information Processing and Cloud Computing, Zhuhai, China, Dec. 18-20, 2025 (AIIPCC 2025)*
Topic: CVXopt-Aided AI for HSI Super-Resolution: CAUWT

- *2025 17th International Conference on Signal Processing Systems (ICSPS), Chengdu, China, Oct. 24-26, 2025 (ICSPS 2025).*
Topic: Privacy-Preserving Federated Clustering and Classification by CVX Optimization (CVXopt) or AI-aided CVXopt

- *2025 2nd International Conference on Modeling, Natural Language Processing and Machine Learning, Fuzhou, China, May 16-18, 2025 (CMNM 2025)*
Topic: CVXopt-Aided AI for Unsupervised HSI Denoising and Super-Resolution

- *The 3rd International Conference on Algorithms, Network and Communication Technology, Wuhan, China, Dec. 20-22, 2024 (ICANCT 2024)*
Topic: CVXopt-Aided AI for Unsupervised HSI Denoising and Super-Resolution

- *4th IEEE Conference on Artificial Intelligence and Signal Processing, VIT-AP University, Amaravati, Andhra Pradesh, India, Oct. 26-28, 2024 (AISP 2024)*
Topic: Convex Optimization-Aided AI: DIP-based Unsupervised HSI Denoising and Super-Resolution

- *IEEE Authorship Workshop, NTHU, Taiwan, 2024/10/16 (IEEE 投稿講座,涵堂資訊)*
  Topic: Writing of IEEE Transactions Papers【如何成功投稿 IEEE 期刊】
- *2024 4th International Conference on Artificial Intelligence, Big Data and Algorithms, Zhengzhou, China, July 5-7, 2024 (CAIBDA 2024)*
  Topic: Convex Optimization Aided Artificial Intelligence: DIP-based Unsupervised HSI Denoising and Super-Resolution
- *2024 International Conference on Advanced Robotics, Automation Engineering and Machine Learning, Hangzhou, China, June 28-30, 2024 (ARAEML 2024)*
  Topic: Convex Optimization Aided Artificial Intelligence: DIP-based Unsupervised HSI Denoising and Super-Resolution
- *2024 9th International Conference on Intelligent Computing and Signal Processing, Xi'an, China, Apr. 19-21, 2024 (ICSP 2024).*
  Topic: Privacy-preserving Federated Clustering and Classification by CVX Optimization (CVXopt) or AI-aided CVXopt
- *2023 4th International Conference on Electronics, Communications and Information Technology, Sanya, China, Dec. 22-24, 2023 (CECIT 2023).*
  Topic: Convex Optimization Aided Artificial Intelligence
- *2023 13th International Conference on Communication and Network Security, Fuzhou, China, Dec. 1-3, 2023 (ICCNS 2023).*
  Topic: Convex Optimization Aided Artificial Intelligence
- *2023 2nd International Conference on Communications, Information System and Data Science, Xi'an, China, Nov. 24-26, 2023 (CISDS 2023).*
  Topic: Convex Optimization Assisted Artificial Intelligence
- *2023 9th EAI International Conference on Intelligent IoT, Nanjing, China, Oct. 27-29, 2023 (EAI IoTaaS 2023).*
  Topic: Convergence of Convex Optimization & Artificial Intelligence
- *2023 5th International Conference on Communications, Information System and Computer Engineering, Guangzhou, China, Apr. 14-16, 2023 (CISCE 2023).*
  Topic: Hyperspectral Image Restoration Based on Deep Image Prior and Least Favorable Distribution
- *2022 7th International Conference on Frontiers of Signal Processing, Paris, France, Sep. 7-9, 2022 (ICFSP 2022).*
  Topic: Unsupervised Hyperspectral Denoising Based on Deep Image Prior and Least Favorable Distribution
- *2021 10th International Conference on Software and Information Engineering and 2021 4th International Conference on Network Technology, Cairo, Egypt, Nov. 12-14, 2021 (ICSIE and ICNT 2021).*
  Topic: Global Secrecy Energy Efficiency Maximization in CR Networks with Untrusted Secondary Users
- *2021 3rd International Conference on Advances in Computer Technology, Information Science and Communications and 2021 3rd International Conference on Advances in Computer Vision, Image and Virtualization, Shanghai, China, April 23-25, 2021 (CTISC and CVIV 2021).*
  Topic: Secrecy Energy Efficiency in Cognitive Radio Networks with Untrusted Secondary Users
- *2021 IEEE International Conference on Information Communication and Software Engineering and 2021 6th International Conference on Mathematics and Artificial Intelligence, Chengdu, China, March 19-21, 2021 (ICICSE and ICMAI 2021).*
  Topic: Secrecy Energy Efficiency in Cognitive Radio Networks with Untrusted Secondary Users
- *2020 12th International Conference on Communication Software and Networks, Chongqing, China, June 12-15, 2020 (ICCSN 2020).*
  Topic: Local-Density Subspace Distributed Clustering for High-Dimensional Data
- *2018 3rd International Conference on Communication, Image and Signal Processing, Sanya, China, Nov. 16-18, 2018 (CCISP 2018).*
  Topic: Convex Optimization for Signal Processing and Communications: From Fundamentals to Applications
- *2018 International Conference on Sensor Networks and Signal Processing, Xi'An, China, Oct. 28-31, 2018 (SNSP 2018).*
  Topic: Super-Resolution Image via Hyperspectral and Multispectral Data Fusion Using Big-data

Convex Optimization
- *5th International Conference on Big Data Analysis and Data Mining,*
  Rome, Italy, June 20-21, 2018 (Data Mining 2018).
  Topic: A Convex Optimization Based Coupled Non-Negative Matrix Factorization Algorithm for Hyperspectral and Multispectral Data Fusion
- *2018 2nd International Conference on Data Mining, Communications and Information Technology,*
  Shanghai, China, May 25-27, 2018 (DMCIT 2018).
  Topic: Blind Deconvolution Based Super-Resolution Imaging with ROSIS/HYDICE/AVIRIS Sensors via Big Data Convex Optimization
- *The 27th Wireless and Optical Communications Conference,*
  National Dong Hwa University, Hualien, Taiwan, April 30- May 1, 2018 (WOCC 2018).
  Topic: Blind Deconvolution Based Super-Resolution Imaging with ROSIS/HYDICE/AVIRIS Sensors via Big Data Convex Optimization
- *The International Mathematical Meeting and the Annual Meeting of the Taiwanese Mathematical Society,*
  National University of Kaohsiung, Kaohsiung, Taiwan, Dec. 19-20, 2015.
  Topic: Outage Constrained Robust Transmit Optimization for Multiuser MISO Downlinks: Tractable Approximations by Conic Optimization
- *IEEE China Summit and International Conference on Signal and Information Processing,*
  Beijing, China, July 6-10, 2013 (IEEE ChinaSIP 2013).
  Topic: Convex Geometric Analysis for Non-Negative Blind Source Separation
- *2nd International Symposium on IT Convergence Engineering,*
  POSTECH, Pohang, Korea, August 19-20, 2010 (ISITCE 2010).
  Topic: Non-Negative Blind Source Separation for Biomedical Image Analysis
- *The International Workshop on Optimization and Signal Processing,*
  Chinese University of Hong Kong, Hong Kong, Dec. 19-21, 2007.
 *Topic: Non-Negative Least-correlated Component Analysis for Separation of Dependent Sources*

VI. **Invited Short Courses**

1. **University of Electronic Science and Technology of China (UESTC),** Chengdu, China (2025/6/30-2025/7/4)**:** *Convex Optimization from Fundamentals to AI-Applications*
2. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2022/07/04-2022/07/22)**:** *Convex Optimization from Fundamentals to Applications*
3. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2021/06/28-2021/07/09)**:** *Convex Optimization from Fundamentals to Applications*
4. **Xidian University (XDU),** Xi'an, China (2019/08/05-2019/08/30)**:** *Convex Optimization for Communications and Signal Processing*
5. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2019/07/04-2019/07/22)**:** *Convex Optimization from Fundamentals to Applications*
6. **Shandong Normal University (SDNU),** Jinan, China (2018/08/05-2018/08/25)**:** *Convex Optimization from Fundamentals to Applications*
7. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2018/06/30-2018/07/21)**:** *Convex Optimization from Fundamentals to Applications*
8. **Shandong University (SDU),** Jinan, China (2017/10/30-2017/11/14)**:** *Convex Optimization from Fundamentals to Applications*
9. **Beijing Jiaotong University (BJTU),** Beijing, China (2017/08/05-2017/08/26)**:** *Convex Optimization from Fundamentals to Applications*
10. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2017/07/01-2017/07/22)**:** *Convex Optimization from Fundamentals to Applications*
11. **BUPT,** Beijing, China (2016/07/14-2016/07/28)**:** *Convex Optimization from Fundamentals to Applications*
12. **University of Electronic Science and Technology of China (UESTC),** Chengdu, China (2015/08/30-2015/09/13): *Convex Optimization from Fundamentals to Applications*
13. **Sun Yat-Sen University,** Guangzhou, China (2015/08/03-2015/08/14)**:** *Convex Optimization from Fundamentals to Applications*

14. **BJTU,** Beijing, China (2015/07/06-2015/07/20)**:** *Convex Optimization from Fundamentals to Applications*
15. **UESTC,** Chengdu, China (2014/09/01-2014/09/19)**:** *Convex Optimization from Fundamentals to Applications*
16. **Xiamen University**, Fujian Province, China (2013/12/5-2013/12/19)**:** *Convex Optimization from Fundamentals to Applications*
17. **UESTC,** Chengdu, China (2013/11/11-2013/11/22)**:** *Convex Optimization from Fundamentals to Applications*
18. **BJTU,** Beijing, China (2013/7/12-2013/7/25)**:** *Convex Optimization from Fundamentals to Applications*
19. **Tsinghua University,** Beijing, China (2012/8/20-2012/8/31)**:** *The Optimization Theories and Methods with Applications in Aerospace Information Transmission and Processing*
20. **Tianjin University,** Tianjin, China (2011/8/22-2011/9/2)**:** *Convex Optimization for Communications and Signal Processing*
21. **Tsinghua University,** Beijing, China (2010/8/23-2010/9/3)**:** *Convex Optimization for Communications and Signal Processing*
22. **SDU,** Jinan, China (2010/1/5-2010/1/18)**:** *Convex Optimization for Communications and Signal Processing*

PUBLICATIONS: **(Total citations: <u>8754 citations and 41 h-index papers</u> by <u>Google Scholar</u> by 2026/2/19)**

More than 240 technical papers published, including more than 100 journal papers (mainly in *IEEE Trans. Signal Processing*), 3 book chapters and more than 140 peer-reviewed conference papers, as well as 2 graduate-level textbooks, *Blind Equalization and System Identification* (approx. 480 pages), Springer-Verlag, 2006, and a new graduate-level textbook book, *Convex Optimization for Signal Processing and Communications: From Fundamentals to Applications*, (432 pages), CRC Press, 2017. The details are as follows:

Cited by	All	Since 2021
Citations	8754	2933
h-index	41	24
i10-index	121	48
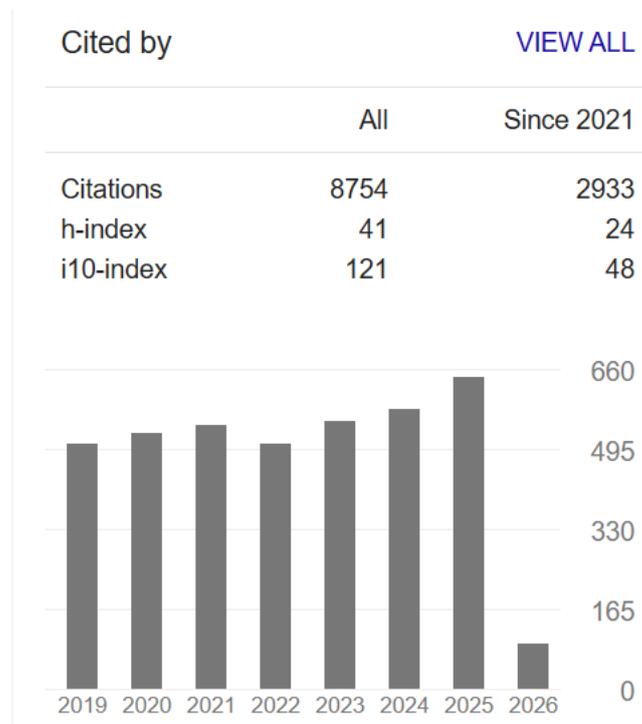
A-1. Journal Papers:

[1] Y. Fang, Y. Liu, Z. Long, C.-Y. Chi, and C. Zhu, "Content-adaptive unfolding wavelet transformer for hyperspectral image super-resolution," IEEE Trans. Image Processing, vol. 35, pp. 1923-1936, 2026.
[2] T. Wei, H. Huang, L. Wu, C.-Y. Chi, Bhavani Shankar M. R., and B. Ottersten, "Quadratic equality constrained least squares: low-complexity ADMM for global optimality," IEEE Signal Processing Letters, vol. 33, pp. 361-365, 2026.

[3]   X. Wang, Y. Lu, W. Chen, C.-Y. Chi, B. Ai, and D. Niyato, "CMENet: Laplacian pyramid architecture-based deep learning for OFDM channel estimation," IEEE Wireless Communications Letters, vol. 15, pp. 240-244, 2026.

[4]   X. Xie, Y. Lu, C.-Y. Chi, W. Chen, B. Ai, and D. Niyato, "KANsformer for scalable beamforming," IEEE Trans. Vehicular Technology, vol. 74, no. 8, pp. 13202-13206, 2025.

[5]   Y. Lu, C.-Y. Chi, B. Ai, and Z. Zhong, "Rate outage constrained energy efficiency under MISO interference channels," IEEE Trans. Wireless Communications, vol. 24, no. 6, pp. 4677-4689, June 2025.

[6]   W. Mao, Y. Lu, C.-Y. Chi, B. Ai, Z. Zhong, and Z. Ding, "Communication-sensing region for cell-free massive MIMO ISAC systems," IEEE Trans. Wireless Communications, vol. 23, no. 9, pp. 12396-12411, Sep. 2024.

[7]   Y. Fang, Y. Liu, C.-Y. Chi, Z. Long, and C. Zhu, "CS2DIPs: Unsupervised HSI super-resolution using coupled spatial and spectral DIPs," IEEE Trans. Image Processing, vol. 33, pp. 3090-3101, May 2024.

[8]   Y. Li, H.-X. Ren, C.-Y. Chi, and Y.-B. Miao, "Artificial intelligence-guided gut-microenvironment-triggered imaging sensor reveals potential indicators of Parkinson's disease," Advanced Science, vol. 11, no. 23, pp. 1-14, June 2024.

[9]   Y. Li, C.-W. Huang, C.-Y. Chi, and T. Q. S. Quek, "Privacy-preserving federated primal-dual learning for non-convex and non-smooth problems with model sparsification," IEEE Internet of Things Journal, vol. 11, no. 15, pp. 25853-25866, Aug. 2024.

[10]   Y.-A. Geng, C.-Y. Chi, W. Sun, J. Zhang, and Q. Li, "Disentangling clusters from non-Euclidean data via graph frequency reorganization," Information Sciences, vol. 662, Mar. 2024, 120288.

[11]   Y. Li, S. Wang, C.-Y. Chi, and T. Q. S. Quek, "Differentially private federated clustering over non-IID data," IEEE Internet of Things Journal, vol. 11, no. 4, pp. 6705-6721, Feb. 2024.

[12]   C.-H. Lin, Y. Liu, C.-Y. Chi, C.-C. Hsu, H. Ren, and Tony Q. S. Quek, "Hyperspectral tensor completion using low-rank modeling and convex functional analysis," IEEE Trans. Neural Networks and Learning Systems, vol. 35, no. 8, pp. 10736-10750, Aug. 2024.

[13]   K. F. Niresi and C.-Y. Chi, "Robust hyperspectral inpainting via low-rank regularized untrained convolutional neural network," IEEE Geoscience and Remote Sensing Letters, vol. 20, pp. 1-5, Jan. 2023.

[14]   Y. Li, S. Wang, C.-Y. Chi, and T. Q. S. Quek, "Differentially private federated learning in edge networks: The perspective of noise reduction," IEEE Network, vol. 36, no. 5, pp. 167-172, Nov. 2022.

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