Curriculum Vitae

Ben M. Chen

IEEE Fellow ∞ Fellow of Academy of Engineering, Singapore ∞ CAA Fellow

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Education

- ⋈ *Ph.D. in Electrical and Computer Engineering*, Washington State University, Pullman, USA, August 1991
- ⋈ *M.S. in Electrical Engineering*, Gonzaga University, Spokane, Washington, USA, May 1988
- ⋈ *B.S. in Mathematics and Computer Science*, Xiamen University, Xiamen, Fujian, China, July 1983

Professional Experience

- ⋈ *Vice Chairman (Graduate)*, Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong, August 2021–
- ⋈ *Professor*, Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong, August 2018–
- ⋈ *Provost's Chair*, The National University of Singapore, April 2016–August 2018
- ⋈ *Professor*, Department of Electrical and Computer Engineering, The National University of Singapore, January 2005–August 2021
- ⋈ *Head*, Control Science Group, Temasek Laboratories, The National University of Singapore, September 2012–August 2018
- ⋈ *Area Director*, Control, Intelligent Systems and Robotics, Department of Electrical and Computer Engineering, The National University of Singapore, July 2011–April 2018
- ⋈ *Changjiang Guest Chair Professor*, Nanjing University of Science and Technology, China, August 2010–August 2013
- ⋈ *Associate Professor*, Department of Electrical and Computer Engineering, National University of Singapore, July 1999–December 2004
- ⋈ *Senior Lecturer*, Department of Electrical Engineering, National University of Singapore, July 1996–June 1999
- ⋈ *Lecturer*, Department of Electrical Engineering, National University of Singapore, August 1993–June 1996
- ⋈ *Assistant Professor*, Department of Electrical Engineering, State University of New York, Stony Brook, USA, August 1992–August 1993

⋈ *Postdoctoral Associate*, School of Electrical Engineering and Computer Science, Washington State University, USA, August 1991–August 1992

⋈ *Software Engineer*, Software Division, South China Computer Corporation, Guangzhou, China, July 1983–March 1986

Research Interests

⋈ Unmanned Systems; Linear Systems; Robust Control; Control Applications

Membership in Professional Societies

IEEE (Institute of Electrical & Electronic Engineers), USA

⋈ FELLOW (2007) ⋈ SENIOR MEMBER (2000) ⋈ MEMBER (1992) ⋈ STUDENT MEMBER (1989)

CAA (Chinese Association of Automation), China

⋈ FELLOW (2015)

Academy of Engineering, Singapore

⋈ FELLOW (2020)

Awards & Honors

⋈ *Outstanding Contribution Award*, Technical Committee of Control Theory, Chinese Association of Automation, China, 2022

⋈ *Fellow*, Academy of Engineering, Singapore, 2020

⋈ *Provost's Chair*, National University of Singapore, 2016

⋈ *Fellow*, Chinese Association of Automation, China, 2015

⋈ *Changjiang Guest Chair Professorship*, Nanjing University of Science and Technology, China, 2010

⋈ *Best Application Paper Award*, 8th World Congress on Intelligent Control and Automation, Jinan, China, 2010

⋈ *Best Application Paper Award*, 7th Asian Control Conference, Hong Kong, 2009

⋈ *Fellow*, Institute of Electrical & Electronics Engineers (IEEE), USA, 2007

⋈ *Best Industrial Control Application Prize*, 5th Asian Control Conference, Melbourne, Australia, 2004

⋈ *Temasek Young Investigator Award*, Defence Science & Technology Agency, Singapore, 2003

⋈ *IES Prestigious Engineering Achievement Award*, Institute of Engineers, Singapore, 2001

⋈ *University Researcher Award*, National University of Singapore, 2000

⋈ *Asian Young Scholars Award*, The University of Melbourne, Australia, 1997

⋈ *Best Poster Paper Award*, The 2nd Asian Control Conference, Seoul, Korea, 1997

⋈ *Deans Exemplary Teaching Awards 2020*, Faculty of Engineering, Chinese University of Hong Kong

- ⋈ *Teaching Commendation 2008/2009*, Faculty of Engineering, National University of Singapore
- ⋈ *Teaching Commendation 2003/2004*, Faculty of Engineering, National University of Singapore
- ⋈ *Teaching Commendation 2002/2003*, Faculty of Engineering, National University of Singapore
- ⋈ *Teaching Commendation 2001/2002*, Faculty of Engineering, National University of Singapore
- ⋈ *Innovative Teaching Award 1999/2000*, Faculty of Engineering, National University of Singapore
- ⋈ *Marquis Who's Who in the World*, 19th Edition, Marquis Who's Who, USA, 2002
- ⋈ *Cardinal Yu-Pin Scholarship*, Sino-American Amity Fund, Inc., New York, 1986–1991
- ⋈ *Presidential Scholarship*, Gonzaga University, Spokane, Washington, 1986–1988

Awards Won by My UAV Research Teams and Students

- ⋈ Qingxiang Li, Guidong Yang, Xi Chen, Ben M. Chen
  Best Paper Award
  1st International Conference of Net Zero Carbon Built Environment, University of Nottingham, U.K., 2024
- ⋈ Minghao Dou (with X. Liu, D. Huang, B. Wang, J. Cui, Q. Ren, L. Dou, J. Chen, B. M. Chen)
  Guan Zhao-Zhi Award
  Cash Prize: CNY 5,000
  42nd Chinese Control Conference, Tianjin, China, 2023
- ⋈ Ka Lung Cheung, Benyun Zhao, Guidong Yang, Jihan Zhang
  YDC Dare to Change Business Pitch Competition
  Best Business Idea Award
  Cash Prize: HK$15,000
  Young Entrepreneurs Development Council, Hong Kong, 2023
- ⋈ Jihan Zhang, Benyun Zhao, Guidong Yang, Jia Dou, Bingxin Han, Ka Lung Cheung
  Professor Charles K. Kao Student Creativity Award
  Postgraduate Group Champion
  Cash Prize: HK$18,000
  Chinese University of Hong Kong, 2023
- ⋈ Chuanxiang Gao, Ruoyu Wang, Xinyi Wang, Yizhou Chen, Zuoquan Zhao, Wendi Ding
  Professor Charles K. Kao Student Creativity Award
  Postgraduate Group 2nd Runner-up
  Cash Prize: HK$6,000
  Chinese University of Hong Kong, 2023
- ⋈ Ruoyu Wang, Yizhou Chen, Xi Chen, Zixuan Guo, Mark Kyeredey Ansah, Yu Zhai, Ben M. Chen
  Autonomous Indoor Drone Inspection and Modeling System
  Prize: Bronze Medal
  48th Geneva International Exhibition of Inventions, Geneva, Switzerland, 2023

⋈ Guidong Yang, Jihan Zhang, Xi Chen, Benyun Zhao, Chuanxiang Gao, Ka Lung Cheung, Ben M. Chen
Drone and AI-based Digital Platform for Outdoor Built Asset Inspection and Information Management
Prize: Bronze Medal
48th Geneva International Exhibition of Inventions, Geneva, Switzerland, 2023

⋈ Panpan Zhou (with Ben M. Chen)
2021 IEEE CSS Beijing Chapter Young Author Prize
Cash Prize: CNY 2,000
40th Chinese Control Conference, Shanghai, China, 2021

⋈ Kangcheng Liu
Professor Charles K. Kao Student Creativity Award
Postgraduate Individual Merit
Chinese University of Hong Kong, 2021

⋈ Shupeng Lai (with Menglu Lan, Ben M. Chen)
Guan Zhao-Zhi Award
Cash Prize: CNY 5,000
37th Chinese Control Conference, Wuhan, China, 2018

⋈ Team Instinct Cougar
Indoor Competition Champion
International Micro Aerial Vehicle Competition, Toulouse, France, 2017

⋈ Team Instinct Lion
Outdoor Competition Champion
International Micro Aerial Vehicle Competition, Toulouse, France, 2017

⋈ Team U-Lion: Shupeng Lai, Yingcai Bi, Menglu Lan, Jiaxin Li, Hailong Qin, Kun Zhang
Overall Championship Award (Gold), Best Platform Design Award (Gold)
Total Prize: SGD 8,000 in Cash and 5 iPad Mini 4
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2017

⋈ Team AeroLion: Kangli Wang, Yijie Ke, Mo Shan (NUS), Xiang Li, Fei Wang (AeroLion Technologies)
Champion
Total Prize: CNY 100,000 in Cash
Category: Rotor-Wing Competition
The 3rd AVIC Cup — International UAV Innovation Grand Prix, Anji, Zhejiang, China, 2015

⋈ Team V-Lion: Jinqiang Cui, Hailong Qin, Yingcai Bi, Jiaxin Li, Menglu Lan, Mo Shan, Wenqi Liu
1st Runner Up
International Micro Aerial Vehicle Competition, Aachen, Germany, 2015

⋈ Team AP-Lion: Menglu Lan, Jiaxin Lin, Kaijun Liu, Shuai Wang, Mengmi Zhang
Overall Championship Award (Gold), Best Performance Award (Gold), Best Theory of Flight Award (Gold), Best Video Award (Silver)
Total Prize: SGD 8,000 in Cash and 5 Samsung Tablets
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2015

⋈ Team LV-Lion: Yingcai Bi, Jiaxin Li, Wenqi Liu, Hailong Qin, Mo Shan
Overall Championship Award (Silver), Best Performance Award (Silver)
Total Prize: SGD 3,000 in Cash
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2015

⋈ Limiao Bai (Sen Yan, Xiaolian Zheng, Ben M. Chen)
Best Student Paper Award
The 2014 International Conference on Financial Engineering, London, U.K., 2014

⋈ Team AeroLion
Champion
International Micro Aerial Vehicle Competition, Delft, the Netherlands, 2014

⋈ Fei Wang (with P. Liu, S. Zhao, B. M. Chen, S. K. Phang, S. Lai, T. H. Lee, C. X. Cai)
Guan Zhao-Zhi Award
Total Prize: CNY 5,000 in Cash
33rd Chinese Control Conference, Nanjing, China, 2014

⋈ Team U-Lion: Kangli Wang, Yijie Ke, Kun Lin, Tao Pang
Overall Championship Award (Gold), Best Performance Award (Gold), Most Creative Award (Bronze)
Total Prize: SGD 4,000 in Cash and 5 iPads
Category E: Unconventional
Singapore Amazing Flying Machine Competition, 2014

⋈ Team Q_1-Lion: Fei Wang, Swee-King Phang, Zizhang Ai, Wenqi Liu, Wei-Lian Mook
Overall Championship Award (Silver), Best Performance Award (Gold), Best Theory of Flight Award (Gold)
Total Prize: SGD 4,000 in Cash
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2014

⋈ Team Q_2-Lion: Kevin Ang, Jinqiang Cui, Peidong Liu, Shupeng, Lai, Dong Wang
Best Theory of Flight Award (Silver)
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2014

⋈ Team NUS^{2}T-Lion
2nd Place Overall (1st in Final Round)
Total Prize: CNY 80,000 in Cash
Category: Rotor-Wing Competition
The 2nd AVIC Cup — International UAV Innovation Grand Prix, Beijing, China, 2013

⋈ Team NUS^{2}T-Lion
New Innovation Star Award
Total Prize: CNY 10,000 in Cash
Category: Creativity Competition
The 2nd AVIC Cup — International UAV Innovation Grand Prix, Beijing, China, 2013

⋈ Kangli Wang, Xiang Li, Di Deng, Hongyu Tian, Youyang Cheng
Overall Championship Award, Best Performance Award, Most Creative Award

Total Prize: SGD 10,000 in Cash and 5 iPads
Category D2: Fully Autonomous
Singapore Amazing Flying Machine Competition, 2013

⋈ Kevin Ang, Fei Wang, Swee King Phang, Peidong Liu
Most Creative Award
Cash Prize: SGD 2,000
Category E: Unconventional
Singapore Amazing Flying Machine Competition, 2013

⋈ Team GremLion
Finalist (of 9 selected among 144 teams from 153 countries)
DARPA UAVForge Challenge
Defense Advanced Research Projects Agency & Space and Naval Warfare Systems Center, Atlantic, USA, 2012

⋈ Sing-Jie Lee, Yuxiang Wang, Yi-Ling Tan, Sharon Ang, Shiyi Li
Overall Championship Award, Most Creative Award
Total Prize: SGD 10,000 in Cash and 5 iPads
Category D: Autonomous and Flying by Video
Singapore Amazing Flying Machine Competition, 2011

⋈ Swee-King Phang, Jun-Jie Ong, Ronald Yeo
Best Performance Award
Category D: Autonomous and Flying by Video
Cash Prize: SGD 1,000
Singapore Amazing Flying Machine Competition, 2010

⋈ Tao Wang, Fei Wang, Li Liu
Best Theory Award
Category D: Autonomous and Flying by Video
Singapore Amazing Flying Machine Competition, 2009

Publications

⋆ ⋆ ⋆ **Google Scholar Citation Index as of August 28, 2024 — Citations: 17497; h-index: 61; i10-index: 266** ⋆ ⋆ ⋆

A. MONOGRAPHS

1. X. Zheng and B. M. Chen, *Stock Market Modeling and Forecasting: A System Adaptation Approach*, Springer, New York, 2013 (*Lecture Notes in Control and Information Sciences Series*, 161 pages, ISBN 978-1-4471-5154-8).

2. G. Cai, B. M. Chen and T. H. Lee, *Unmanned Rotorcraft Systems*, Springer, New York, 2011 (*Advances in Industrial Control Series*, 267 pages, ISBN 978-0-85729-634-4).

3. B. M. Chen, T. H. Lee, K. Peng and V. Venkataramanan, *Hard Disk Drive Servo Systems*, 2nd Edition, Springer, New York, 2006 (*Advances in Industrial Control Series*, 310 pages, ISBN 1-84628-304-3).

4. B. M. Chen, Z. Lin and Y. Shamash, *Linear Systems Theory: A Structural Decomposition Approach*, Birkhäuser, Boston, 2004 (*Control Engineering Series*, 415 pages, ISBN 0-81763-779-6).

5. C. C. Ko, B. M. Chen and J. Chen, *Creating Web-Based Laboratories*, Springer, New York, 2004 (*Advanced Information and Knowledge Processing Series*, 300 pages, ISBN 1-85233-837-7).

6. B. M. Chen, T. H. Lee and V. Venkataramanan, *Hard Disk Drive Servo Systems*, Springer, New York, 2002 (*Advances in Industrial Control Series*, 273 pages, ISBN 1-85233-500-9).

7. B. M. Chen, *Robust and H_∞ Control*, Springer, New York, 2000 (*Communications and Control Engineering Series*, 446 pages, ISBN 1-85233-255-7).

8. B. M. Chen, *H_∞ Control and Its Applications*, Springer, New York, 1998 (*Lecture Notes in Control and Information Sciences Series*, 351 pages, ISBN 1-85233-026-0).

9. A. Saberi, P. Sannuti and B. M. Chen, *H_2 Optimal Control*, Prentice Hall, London, 1995 (*Systems and Control Engineering Series*, 471 pages, ISBN 0-13-489782-X).

10. A. Saberi, B. M. Chen and P. Sannuti, *Loop Transfer Recovery: Analysis and Design*, Springer, New York, 1993 (*Communications and Control Engineering Series*, 352 pages, ISBN 0-387-19831-8/ISBN 3-540-19831-8).

B. EDITED BOOK

1. J. Chen, B. M. Chen and L. Xie (Ed.), *Unmanned Systems: Best of 10 Years*, World Scientific, Singapore, 2023 (304 pages, ISBN 978-981-127-331-5).

C. MONOGRAPHS TRANSLATED INTO CHINESE

1. G. Cai, B. M. Chen, T. H. Lee and B. Wang, *Unmanned Rotorcraft Systems*, Tsinghua University Press, Beijing, 2012 (Chinese edition; 203 pages, ISBN 978-7-302-29388-0).

2. B. M. Chen and B. Xi, *H_∞ Control and Its Applications*, Science Press, Beijing, 2010 (*Systems and Control Series*, Chinese Edition; 345 pages, ISBN 978-7-03-028742-7).

3. B. M. Chen, Z. Lin and Y. Shamash, *Linear Systems Theory: A Structural Decomposition Approach*, Tsinghua University Press, Beijing, 2008 (Chinese edition translated by Bin Xi; 340 pages, ISBN 978-7-302-16367-1).

D. TEXTBOOKS

1. C. C. Ko and B. M. Chen, *Basic Circuit Analysis for Electrical Engineering*, Prentice Hall, Singapore, 2nd Edition, 1998 (342 pages, ISBN 981-4024-39-2).

2. C. C. Ko and B. M. Chen, *Basic Circuit Analysis for Electrical Engineering*, Prentice Hall, Singapore, 1996 (304 pages, ISBN 981-3076-01-1).

E. PHD DISSERTATION

1. B. M. Chen, *Theory of Loop Transfer Recovery for Multivariable Linear Systems*, Washington State University, Pullman, Washington, USA, 1991.

F. JOURNAL PUBLICATIONS

1. B. Han, C. Gao, X. Zhou, J. Zhang, X. Chen and B. M. Chen, "A comprehensive framework for automated facade defect evaluation using deep learning," Submitted for publication.

2. K. L. Cheung, G. Yang, C. C. Lee, X. Chen and B. M. Chen, "Advancements in civil infrastructure digitization: A review of scan-to-BIM automation methods, technologies, and applications," Submitted for publication.

3. X. Zhou, B. Zhao, X. Chen, J. Chen and B. M. Chen, "Accurate defects detection with deep global feature fusion and effective activation function," Submitted for publication.

4. X. Zhou, L. Li and B. M. Chen, "LENet: Lightweight and effective detector for aerial objects," *Unmanned Systems*, in press.

5. Z. Pan and B. M. Chen, "Cooperative target fencing of multiple double-integrator systems with connectivity preservation," *International Journal of Robust and Nonlinear Control*, Vol. 34, No. 12, pp. 8163–8179, December 2024.

6. G. Yang, X. Zhou, C. Gao, X. Chen and B. M. Chen, "Learnable cost metric based multi-view stereo for point cloud reconstruction," *IEEE Transactions on Industrial Electronics*, Vol. 71, No. 9, pp. 11519-11528, September 2024.

7. X. Zhou, G. Yang, Y. Chen, L. Li and B. M. Chen, "VDTNet: A high-performance visual network for detecting and tracking of intruding drones," *IEEE Transactions on Intelligent Transportation Systems*, Vol. 25, No. 8, pp. 9828–9839, August 2024.

8. B. Zhao, X. Zhou, G. Yang, J. Wen, J. Zhang, J. Dou, G. Li, X. Chen and B. M. Chen, "High-resolution infrastructure defect detection dataset sourced by unmanned systems and validated with deep learning approaches," *Automation in Construction*, Vol. 163, Article Number 105405, July 2024.

9. X. Wang, L. Xi, Y. Ding, and B. M. Chen, "Distributed encirclement and capture of multiple pursuers with collision avoidance," *IEEE Transactions on Industrial Electronics*, Vol. 71, No. 7, pp. 7520–7530, July 2024.

10. Q. Li, G. Yang, C. Gao, Y. Huang, J. Zhang, D. Huang, B. Zhao, X. Chen and B. M. Chen, "Single drone-based 3D reconstruction approach to improve public engagement in conservation of heritage buildings: A case of Hakka Tulou," *Journal of Building Engineering*, Vol. 87, Article Number 108954, June 2024.

11. P. Zhou and B. M. Chen, "Distributed optimal solutions for multiagent pursuit-evasion games for capture and formation control," *IEEE Transactions on Industrial Electronics*, Vol. 71, No. 5, pp. 5224–5234, May 2024.

12. C. Gao, X. Wang, X. Chen and B. M. Chen, "A hierarchical multi-UAV cooperative framework for infrastructure inspection and reconstruction," *Control Theory and Technology*, Vol. 22, pp. 394–405, March 2024.

13. J. Wen, J. Cui, G. Yang, B. Zhao, Y. Zhai, Z. Gao, L. Dou and B. M. Chen, "WaterFormer: Global-local transformer for underwater image enhancement with environment adaptor," *IEEE Robotics and Automation Magazine*, Vol. 31, No. 1, pp. 29–40, March 2024.

14. X. Zhao, Z. Gao, H. Li, H. Ji, H. Yang, C. Li, H. Fang and B. M. Chen, "How challenging is a challenge? CEMS: A challenge evaluation module for SLAM visual perception," *Journal of Intelligent & Robotic Systems*, Vol. 110, Article Number 42, March 2024.

15. Z. Lin, Z. Gao, B. M. Chen, J. Chen and C. Li, "Accurate LiDAR-camera fused odometry and true-color mapping," *IEEE Robotics and Automation Letters*, Vol. 9, No. 3, pp. 2495–2502, March 2024.

16. X. Liu, M. Dou, R. Yan, D. Huang, S. Gao, B. Wang, J. Cui, Q. Ren, L. Dou, Z. Gao, J. Chen and B. M. Chen, "TJ-FlyingFish: An unmanned morphable aerial-aquatic vehicle system," *Unmanned Systems*, Vol. 12, No. 2, pp. 409–428, March 2024.

17. Z. Pan and B. M. Chen, "Cooperative target fencing of multiple vehicles for a general target with connectivity preservation and collision avoidance," *Journal of Systems Science & Complexity*, Vol. 37, No. 1, pp. 136–151, February 2024.

18. Z. Gao, X. Zhao, M. Cao, Z. Li, K. Liu and B. M. Chen, "Synergizing low rank representation and deep learning for automatic pavement crack detection," *IEEE Transactions on Intelligent Transportation Systems*, Vol. 24, No. 10, pp. 10676–10690, October 2023.

19. K. Liu and B. M. Chen, "Industrial UAV/UGV-based domain adaptive crack recognition: From system and database constructions to real-Site inspections," *IEEE Transactions on Industrial Electronics*, Vol. 70, No. 9, pp. 9410–9420, September 2023.

20. M. Dou, X. Liu, D. Huang, B. Wang, L. Dou, J. Chen and B. M. Chen, "Mathematical modeling of underwater motion for a cross-medium vehicle (in Chinese)," *Control Engineering of China*, Vol. 30, No. 8, pp. 1488–1500, August 2023.

21. Z. Pan and B. M. Chen, "Connectivity-preserving formation tracking for multiple double integrators by a self-tuning adaptive distributed observer," *IEEE Control Systems Letters*, Vol. 7, pp. 2221-2226, June 2023.

22. P. Zhou, S. Lai, J. Cui and B. M. Chen, "Formation control of unmanned rotorcraft systems with state constraints and inter-agent collision avoidance," *Autonomous Intelligent Systems*, Volume 3, Article No. 4 (12 pages), May 2023.

23. C. Gao, X. Wang, R. Wang. Z. Zhao, Y. Zhai, X. Chen and B. M. Chen, "A UAV-based explore-then-exploit system for autonomous indoor facility inspection and scene reconstruction," *Automation in Construction*, Vol. 148, Article No. 104753 (14 pages), April 2023.

24. P. Zhou and B. M. Chen, "Semi-global leader-following output consensus of discrete-time heterogeneous linear systems subject to actuator position and rate saturation," *IEEE Transactions on Automatic Control*, Vol. 68, No. 2, pp. 1231–1236, February 2023.

25. J. Shen, B. Wang, B. M. Chen, R. Bu and B. Jin, Survey of research on wind resistance for quadrotor UAVs, *Unmanned Systems*, Vol. 11, No. 1, pp. 5–15, January 2023.

26. K. Liu, Z. Gao, F. Lin and B. M. Chen, "FG-Net: A fast and accurate framework for large-scale LiDAR point cloud understanding," *IEEE Transactions on Cybernetics*, Vol. 53, No. 1, pp. 553–564, January 2023.

27. G. Yang, K. Liu, J. Zhang, B. Zhao, Z. Zhao, X. Chen and B. M. Chen, Datasets and processing methods for boosting visual inspection of civil infrastructure: A comprehensive review and case study on crack classification, segmentation, and detection, *Construction and Building Materials*, Vol. 356, Article No. 129226 (25 pages), November 2022.

28. Y. Ding, B. Xin, L. Dou, J. Chen and B. M. Chen, "A memetic algorithm for curvature-constrained path planning of messenger UAV in air-ground coordination," *IEEE Transactions on Automation Science and Engineering*, Vol. 19, No. 4, pp. 3735–3749, October 2022.

29. P. Zhou and B. M. Chen, "Semi-global leader-following output consensus of heterogeneous systems with all agents subject to input saturation," *International Journal of Robust and Nonlinear Control*, Vol. 32, No. 8, pp. 4648–4664, August 2022.

30. Y. Chen, S. Lai, J. Cui, B. Wang and B. M. Chen, "GPU-accelerated incremental Euclidean distance transform for online motion planning of mobile robots," *IEEE Robotics and Automation Letters*, Vol. 7, No. 3, pp. 6894–6901, July 2022.

31. P. Zhou and B. M. Chen, "Formation-containment control of Euler-Lagrange systems of leaders with bounded unknown inputs," *IEEE Transactions on Cybernetics*, Vol. 52, No. 7, pp. 6342–6353, July 2022.

32. L. Xi, X. Wang, L. Jiao, S. Lai, Z. Peng and B. M. Chen, "GTO-MPC based target chasing using a quadrotor in cluttered environments," *IEEE Transactions on Industrial Electronics*, Vol. 69, No. 6, pp. 6026–6035, June 2022.

33. B. M. Chen, "On the trends of autonomous unmanned systems research," *Engineering*, Vol. 12, pp. 20–23, May 2022.

34. P. Zhou and B. M. Chen, "Semi-global leader-following consensus-based formation flight of unmanned aerial vehicles," *Chinese Journal of Aeronautics*, Vol. 35, No. 1, pp. 31–43, January 2022.

35. P. Zhou and B. M. Chen, "Semi-global leader-following output consensus of heterogeneous systems subject to actuator position and rate saturation," *Autonomous Intelligent Systems*, Vol. 1, Article No. 8 (13 pages), October 2021.

36. X. Liu, Z. Gao and B. M. Chen, "IPMGAN: Integrating physical model and generative adversarial network for underwater image enhancement," *Neurocomputing*, Vol. 453, pp. 538–551, September 2021.

37. Y. Zhou, S. Lai, H. Cheng, A. H. M. Redhwan, P. Wang, J. Zhu, Z. Gao, Z. Ma, Y. Bi, F. Lin and B. M. Chen, "Towards autonomy of micro aerial vehicles in unknown and GPS-denied environments," *IEEE Transactions on Industrial Electronics*, Vol. 68, No. 8, pp. 7642–7651, August 2021.

38. X. Wang, L. Xi, Y. Chen, S. Lai, F. Lin and B. M. Chen, "Decentralized MPC-based trajectory generation for multiple quadrotors in cluttered environments," *Guidance, Navigation and Control*, Vol. 1, Article No. 2150007 (20 pages), July 2021.

39. L. Xi, Z. Peng, L. Jiao and B. M. Chen, "Smooth quadrotor trajectory generation for tracking a moving target in cluttered environments," *Science China Information Sciences*, Vol. 64, Article No. 172209 (16 pages), July 2021.

40. Y. H. Tan and B. M. Chen, "Survey on the development of aerial-aquatic hybrid vehicles," *Unmanned Systems*, Vol. 9, No. 3, pp. 263–282, July 2021.

41. Y. Lyu, J. Hu, B. M. Chen, C. Zhao and Q. Pan, "Multivehicle flocking with collision avoidance via distributed model predictive control," *IEEE Transactions on Cybernetics*, Vol. 51, No. 5, pp. 2651–2662, May 2021.

42. M. Lan, S. Lai, T. H. Lee and B. M. Chen, "A survey on motion and task planning techniques for unmanned rotorcraft systems," *Unmanned Systems*, Vol. 9, No. 2, pp. 165–198, April 2021.

43. X. Liu, Z. Gao and B. M. Chen, "MLFcGAN: Multi-level feature fusion based conditional GAN for underwater image color correction," *IEEE Geoscience and Remote Sensing Letters*, Vol. 17, No. 9, pp. 1488–1492, September 2020.

44. Y. H. Tan and B. M. Chen, "Thruster allocation and mapping of aerial and aquatic modes for a morphable multimodal quadrotor," *IEEE/ASME Transactions on Mechatronics*, Vol. 25, No. 4, pp. 2065–2974, August 2020.

45. M. Lan, S. Lai and B. M. Chen, "Integrated task and motion planning for quadrotors under metric interval temporal logic specifications," *Control Theory and Applications*, Vol. 36, No. 11, pp. 1952–1964, November 2019.

46. S. Lai, M. Lan and B. M. Chen, "Model predictive local motion planning with boundary state constrained primitives," *IEEE Robotics and Automation Letters*, Vol. 4, No. 4, pp. 3577–3584, October 2019.

47. Y. Bi, M. Lan, J. Li, S. Lai and B. M. Chen, "A lightweight autonomous MAV for indoor search and rescue," *Asian Journal of Control*, Vol. 21, No. 4, pp. 1732–1744, July 2019.

48. S. Lai, M. Lan, K. Gong and B. M. Chen, "Axis-coupled trajectory generation for chains of integrators through smoothing splines," *Control Theory and Technology*, Vol. 17, No. 1, pp. 48–61, February 2019.

49. S. Lai, M. Lan, Y. Li and B. M. Chen, "Safe navigation of quadrotors with jerk limited trajectories," *Frontiers of Information Technology & Electronic Engineering*, Vol. 20, No. 1, pp. 107–119, January 2019.

50. H. Qin, Y. Bi, F. Lin, Y. F. Zhang and B. M. Chen, "A 3D rotating laser-based navigation solution for micro aerial vehicles in dynamic environments," *Unmanned Systems*, Vol. 6, No. 4, pp. 297–305, December 2018.

51. L. Zhang, F. Deng, J. Chen, Y. Bi, S. K. Phang, X. Chen and B. M. Chen, "Vision-based target three-dimensional geolocation using unmanned aerial vehicles," *IEEE Transactions on Industrial Electronics*, Vol. 65, No. 10, pp. 8052–8061, October 2018.

52. Y. H. Tan, S. Lai, K. Wang and B. M. Chen, "Cooperative control of multiple unmanned aerial systems for heavy duty carrying," *Annual Reviews in Control*, Vol. 46, pp. 44–57, July 2018.

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I. BOOK REVIEW

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J. EDITORIALS

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15. *Special Project for DARPA UAVForge Competition*, DSO National Laboratories, 2012, S$230,040.
16. *Development of Autonomous Micro Aerial Vehicles*, with T. H. Lee and P. Tan, DSO National Laboratories, 2011–2013, S$625,800.
17. *Optimal Motion Planning in Obstacle-Rich Environment*, with W. Kang (PI, Naval Postgraduate School, USA), Temasek Defence Systems Institute, National University of Singapore, 2010–2013, US$148,521.
18. *Development of a Sophisticated 3D Indoor Navigation System for UAVs*, with H. Lin and T. H. Lee, Temasek Defence Systems Institute, National University of Singapore, 2009–2012, S$300,000.
19. *Development of Multi-UAV Testbeds and Vision-Based Navigation and Motion Coordination*, with K. Y. Lum and K. Peng, Temasek Laboratories, National University of Singapore, 2009–2013, S$200,000.
20. *Cooperative Reconfiguration Control for Multiple Unmanned Air Vehicles*, with H. Lin (PI), T. H. Lee and C. Chen, Temasek Defence Systems Institute, National University of Singapore, 2008–2011, S$300,000.
21. *Technologies to Lead Unmanned Air Vehicles via Manned Air Vehicles*, with T. H. Lee and R. Teo, Temasek Defence Systems Institute, National University of Singapore, 2007–2010, S$300,000.
22. *Nonlinear Flight Model Identification & Control for Vertical Take-off and Landing UAV in Formation*, with K. Y. Lum and K. Peng, Temasek Laboratories, National University of Singapore, 2007–2009, S$100,000.
23. *Nonlinear Control of Unmanned Flying Vehicles*, Defence Science & Technology Agency, Singapore, 2003–2006, S$700,000.
24. *Compensation of Friction in Hard Disk Drives*, with T. H. Lee, National University of Singapore, 2003–2005, S$130,432.
25. *Virtual Reality Interface for Web-Based Remote Experimentation*, with C. C. Ko (PI), Singapore Advanced Research & Education Network (SingAREN), 2001–2003, S$336,000.
26. *Dual Stage Servo System for Hard Disk Drives*, with T. H. Lee and G. Guo, National University of Singapore, 2000–2004, S$312,175.
27. *Web-based Virtual Laboratory*, with C. C. Ko (PI), National University of Singapore, 1998–2000, S$174,650.
28. *Dual Actuator Control System for Read/Write Head Actuation in Rotating Memory Devices*, with Siri Weerasooriya and Lee Tong Heng, National University of Singapore, 1996–1999, S$178,000.
29. *Gain Scheduling for Robust Controllers in Flight Control Systems*, with Lee Tong Heng and Poh Eng Kee, Defence Science Organisation, Ministry of Defence, Singapore, 1994–1995, S$5,000.

PhD Students Supervised/Co-Supervised

1. Jialiang Wang, Ph.D., CUHK, on-going
2. Zongzhou Wu, Ph.D., CUHK, on-going
3. Jiwen Xu, Ph.D., CUHK, on-going
4. Yiwei Chen, Ph.D., CUHK (HKPFS), on-going
5. Yijun Huang, Ph.D., CUHK, on-going

6. Wendi Ding, Ph.D., CUHK, on-going
7. Zixuan Guo, Ph.D., CUHK, on-going
8. Bingxin Han, Ph.D., CUHK, on-going
9. Benyun Zhao, Ph.D., CUHK, on-going
10. Zhipeng Lin, Ph.D., CUHK, on-going
11. Junjie Wen, Ph.D., CUHK, on-going
12. Ruoyu Wang, Ph.D., CUHK, on-going
13. Zuoquan Zhao, Ph.D., CUHK, on-going
14. Guidong Yang, Ph.D., CUHK, on-going
15. Ruixin Yan, PhD, CUHK, on-going
16. Xunkuai Zhou, PhD, TJU, 2024
17. Jihan Zhang, PhD, CUHK, 2024
18. Minghao Dou, PhD, CUHK, 2024
19. Xuchen Liu, PhD, CUHK, 2024
20. Dongyue Huang, PhD, CUHK, 2024
21. Songqun Gao, PhD, CUHK, 2024
22. Chuanxiang Gao, PhD, CUHK, 2024
23. Zhenjun Zhao, PhD, CUHK, 2023
24. Zini Pan, PhD, CUHK, 2023
25. Yizhou Chen, PhD, CUHK, 2023
26. Xinyi Wang, PhD, CUHK, 2023
27. Kangcheng Liu, PhD, CUHK (HKPFS), 2022
28. Panpan Zhou, PhD, CUHK, 2021
29. Yu Herng Tan, PhD, NUS (President Fellow), 2020
30. Xiaodong Liu, PhD, NUS, 2020
31. Menglu Lan, PhD, NUS (NGS Scholar), 2020
32. Jiaxin Li, PhD, NUS (NGS Scholar), 2018
33. Yingcai Bi, PhD, NUS (NGS Scholar), 2018
34. Yijie Ke, PhD, NUS, 2017
35. Kangli Wang, PhD, NUS (President Fellow), 2017

36. Shupeng Lai, PhD, NUS (NGS Scholar), 2016
37. Limiao Bai, PhD, NUS (NGS Scholar), 2016
38. Kun Li, PhD, NUS, 2015
39. Jinqiang Cui, PhD, NUS (NGS Scholar), 2015
40. Kevin Ang, PhD, NUS (DSO Scholar), NUS, 2015
41. Swee King Phang, PhD, NUS (NGS Scholar), 2014
42. Shiyu Zhao, PhD, NUS (NGS Scholar), 2014
43. Fei Wang, PhD, NUS (NGS Scholar), 2014
44. Xiaoyang Li, PhD, NUS, 2013 (co-supervised)
45. Ali Karimoddini, PhD, NUS, 2013 (co-supervised)
46. Xiaomeng Liu, PhD, NUS, 2013 (co-supervised)
47. Yajun Sun, PhD, NUS, 2013 (co-supervised)
48. Xiaolian Zheng, PhD, NUS, 2012
49. Xiangxu Dong, PhD, NUS, 2012
50. Feng Lin, PhD, NUS, 2011
51. Ben Yun, PhD, NUS, 2010
52. Guowei Cai, PhD, NUS, 2009
53. Chin-Kwan Thum, PhD, NUS, 2009
54. Chee-Khiang Pang, PhD, NUS, 2007
55. Guoyang Cheng, PhD, NUS, 2006
56. Yingjie He, PhD, NUS, 2006
57. Shijian Lu, PhD, NUS, 2005
58. Minghua He, PhD, NUS, 2003
59. Zhongming Li, PhD, NUS, 2003
60. Jianping Chen, PhD, NUS, 2003
61. Venkatakrishnan Venkataramanan, PhD, NUS, 2002
62. Kexiu Liu, PhD, NUS, 2001

Master of Engineering Students Supervised/Co-Supervised

1. Mingqiao Han, Master of Philosophy, CUHK,
2. Daniel Chueng, Master of Philosophy, CUHK, 2024

3. Jia Dou, Master of Philosophy, CUHK, 2023
4. Yu Zhai, Master of Philosophy, CUHK, 2022
5. Junji Zhu, Master of Engineering, NUS, 2019
6. Yu Chen, Master of Engineering, NUS, 2019
7. Shuai Zhang, Master of Engineering, NUS, 2018
8. Xu Yan, Master of Engineering, NUS, 2018
9. Mingjie Lao, Master of Engineering, NUS, 2018
10. Xudong Chen, Master of Engineering, NUS, 2018
11. Hongyu Tian, Master of Engineering, NUS, 2018
12. Hailong Qin, Master of Engineering, NUS, 2017
13. Tao Pang, Master of Engineering, NUS, 2016
14. Peidong Liu, Master of Engineering, NUS, 2015
15. Remus Chua, Master of Engineering, NUS, 2003
16. Chao Wu, Master of Engineering, NUS, 2003
17. Guowen Zeng, Master of Engineering, NUS, 2001
18. Xinmin Liu, Master of Engineering, NUS, 2000
19. Chen Lin, Master of Engineering, NUS, 2000
20. Shihong Chen, Master of Engineering, NUS, 2000
21. Teck-Beng Goh, Master of Engineering, NUS, 1999
22. Feng Gu, Master of Engineering, NUS, 1999
23. Lan Wang, Master of Engineering, NUS, 1998
24. Xiaoping Hu, Master of Engineering, NUS, 1998
25. Boon-Choy Siew, Master of Engineering, NUS, 1997
26. Jun He, Master of Engineering, NUS, 1997
27. Yi Guo, Master of Engineering, NUS, 1996

Undergraduate and Graduate Courses Taught

1. *Complex Variables for Engineers*, Chines University of Hong Kong, Course Level: 2nd Year
2. *Control and Industrial Automation*, Chines University of Hong Kong, Course Level: Graduate
3. *Linear System Theory and Design*, Chines University of Hong Kong, Course Level: Graduate

4. *Complex Analysis and Differential Equations for Engineers*, Chines University of Hong Kong, Course Level: 2nd Year
5. *Feedback Control Systems*, National University of Singapore, Course Level: 3rd Year
6. *Advanced in Intelligent Systems*, National University of Singapore, Course Level: 4th Year
7. *Special Topic in Automation and Control*, National University of Singapore, Course Level: Graduate
8. *Electrical Engineering (Applications)*, National University of Singapore, Course Level: 1st Year
9. *EE Foundation*, National University of Singapore, Course Level: Pre-admission
10. *Analytical Methods in ECE*, National University of Singapore, Course Level: 2nd Year
11. *Digital Control Systems*, National University of Singapore, Course Level: 3rd Year
12. *Circuits*, National University of Singapore, Course Level: 2nd Year
13. *Control Systems*, National University of Singapore, Course Level: Postgraduate Diploma Course
14. *Linear Algebra and Numerical Analysis*, National University of Singapore, Course Level: 3rd Year
15. *Engineering Mathematics III*, National University of Singapore, Course Level: 2nd Year
16. *Electrical Engineering (Circuits)*, National University of Singapore, Course Level: 1st Year
17. *Multivariable Control Systems*, National University of Singapore, Course Level: Graduate
18. *Optimal Control Systems*, National University of Singapore, Course Level: Graduate
19. *Control Systems I*, National University of Singapore, Course Level: 4th Year
20. *Computer Control Systems*, National University of Singapore, Course Level: Graduate
21. *Optimal Control*, State University of New York, Stony Brook, Course Level: Graduate
22. *Linear Systems*, State University of New York, Stony Brook, Course Level: Graduate
23. *Introduction to Control Systems*, Washington State University, Course Level: 4th Year

Editorial Work

⋈ *Editor*, International Journal of Robust and Nonlinear Control, 2022–

⋈ *Associate Editor*, Guidance, Navigation and Control, 2021–

⋈ *Associate Editor*, Autonomous Intelligent Systems, 2020–

⋈ *Deputy Editor-in-Chief*, Control Theory and Technology, 2013–

⋈ *Editor-in-Chief*, Unmanned Systems, 2013–

⋈ *Associate Editor*, Science China: Information Science, 2015–2023

⋈ *Editorial Board Member*, Journal of Systems Science and Complexity, 2014–2019

⋈ *Associate Editor*, IEEE/CAA Journal of Automatica Sinica, 2014–2016

- ⋈ *Associate Editor*, Frontier of Electrical and Electronic Engineering, 2010–2012
- ⋈ *Guest Editor*, Mechatronics, 2011
- ⋈ *Guest Editor*, Transactions of the Institute of Measurement and Control, 2011
- ⋈ *Guest Editor*, Journal of Control Theory and Applications, 2010
- ⋈ *Editor-at-Large*, Journal of Control Theory and Applications, 2008–2013
- ⋈ *Associate Editor*, Chinese Control Conference Editorial Board, 2008–2012
- ⋈ *Associate Editor*, Transactions of the Institute of Measurement and Control, 2007–2010
- ⋈ *Associate Editor*, Journal of Control Science and Engineering, 2006–2009
- ⋈ *Associate Editor*, Automatica, 2005–2008
- ⋈ *Associate Editor*, Systems & Control Letters, 2004–2010
- ⋈ *Member of International Advisory Board*, Kuwait Journal of Science & Engineering, 2003–2013
- ⋈ *Associate Editor*, Control and Intelligent Systems, 2002–2007
- ⋈ *Associate Editor*, Asian Journal of Control, 2002
- ⋈ *Guest Editor*, Transactions of the South African Institute of Electrical Engineers, 2002
- ⋈ *Associate Editor*, IEEE Transactions on Automatic Control, 1999–2001
- ⋈ *Associate Editor*, Conference Editorial Board, IEEE Control Systems Society, 1997–1998

Activities in Professional Societies

- ⋈ *Member*, IEEE Systems, Man, and Cybernetics Society Fellow Evaluating Committee, 2018–2019
- ⋈ *Member*, IEEE Aerospace and Electronic Systems Society Fellow Evaluating Committee, 2015
- ⋈ *Member*, IEEE Systems Council Fellow Evaluating Committee, 2010
- ⋈ *Member*, Technical Committee on Control Theory, Chinese Association of Automation, China, 2008–
- ⋈ *Deputy Chairman*, IEEE Control Systems Chapter Committee, Singapore, 2006-2007; 2014–2015
- ⋈ *Chairman*, IEEE Control Systems Chapter, Singapore, 2002–2003
- ⋈ *Treasurer*, IEEE Control Systems Chapter, Singapore, 2000–2001
- ⋈ *Member*, IEEE Control Systems Chapter Committee, Singapore, 1998–1999; 2004–2005; 2010–2013
- ⋈ *Honorary Secretary*, IEEE Control Chapter, Singapore, 1994–1997; 2008–2009

Keynote, Plenary and Invited Speakers

- ⋈ *Keynote Speaker*, 7th International Conference on Aeronautical, Aerospace and Mechanical Engineering, Hong Kong, China, March 2024

- ⋈ *Keynote Speaker*, 5th International Conference on Electrical Engineering and Control Technologies, Chengdu, China, December 2023
- ⋈ *Keynote Speaker*, 7th Symposium of Chinese Nonlinear Systems and Control, Xiamen, China, October 2023
- ⋈ *Distinguished Lecture*, 5th International Forum on Frontiers of Automation and Artificial Intelligence, Shenyang, China, August 2023
- ⋈ *Keynote Speaker*, Symposium on Advanced Robotics and Automation, 8th World Robot Conference, Beijing, China, August 2023
- ⋈ *Keynote Speaker*, 8th World Robot Conference, Beijing, China, August 2023
- ⋈ *Keynote Speaker*, 2023 International Conference on Advanced Unmanned Aerial Systems, Toronto, Canada, July 2023
- ⋈ *Plenary Speaker*, Frontier Forum on Autonomous Intelligent Unmanned Systems, World Artificial Intelligence Conference, Shanghai, China, July 2023
- ⋈ *Plenary Speaker*, International Frontier Forum of Engineering Science and Technology on Unmanned Intelligent Cluster, Beijing, China, January 2023
- ⋈ *Plenary Speaker*, Southeastern China Science and Technology Forum: Integration of Digital Twin and Control Sciences Technologies, Xiamen, China, November 2022
- ⋈ *Plenary Speaker*, 29th Frontier Forum of Science China Information Sciences: Fundamental Problems in Control of Systems with Uncertainties, Beijing, China, November 2022
- ⋈ *Plenary Speaker*, 4th International Conference on Data-driven Optimization of Complex Systems, Chengdu, China, October 2022
- ⋈ *Plenary Speaker*, Forum on Intelligent Control and Optimization for Unmanned Systems, World Artificial Intelligence Conference, Shanghai, China, September 2022
- ⋈ *Keynote Speaker*, 17th International Conference on Computer Science and Education, Ningbo, China, August 2022
- ⋈ *Distinguished Speaker*, 4th International Forum on Frontiers of Automation and Artificial Intelligence, Shenyang, China, August 2022
- ⋈ *Keynote Speaker*, 2021 IEEE International Conference on Robotics and Biomimetics, Sanya, China, December 2021
- ⋈ *Plenary Speaker*, Forum on Frontiers of AI Technologies, Alibaba Damo Academy, Hangzhou, China, December 2021
- ⋈ *Plenary Speaker*, Innovative Robotics Technologies and Applications Forum, Hong Kong Centre for Logistics Robotics, Hong Kong, December 2021
- ⋈ *Plenary Speaker*, Forum for Optimal Control and AI Technologies, Shandong University & Shandong University of Science and Technology, Qingdao, China, December 2021
- ⋈ *Keynote Speaker*, Southeastern China Science and Technology Forum, Xiamen, China, November 2021
- ⋈ *Keynote Speaker*, 4th IEEE International Conference on Unmanned Systems, Beijing, China, October 2021

- ⋈ *Distinguished Speaker*, 3rd International Forum on Frontiers of Automation and Artificial Intelligence, Shenyang, China, August 2021
- ⋈ *Plenary Speaker*, Forum for New Generation Intelligent Unmanned System and Its Applications, World Artificial Intelligence Conference, Shanghai, China, July 2021
- ⋈ *Plenary Speaker*, 3rd Workshop on Game, Optimization and Intelligent Control of Multi-agent Systems, Beijing, China, June 2021
- ⋈ *Keynote Speaker*, 16th International Conference on Control, Automation, Robotics and Vision (ICARCV 2020), Singapore, December 2020
- ⋈ *Keynote Speaker*, 9th IEEE Data Driven Control and Learning Systems Conference, Liuzhou, China, November 2020
- ⋈ *Distinguished Speaker*, 2nd International Forum on Frontiers of Automation and Artificial Intelligence, Shenyang, China, October 2020
- ⋈ *Invited Speaker*, 20th Anniversary of the Temasek Laboratories @ NUS, Singapore (Online), October 2020
- ⋈ *Invited Speaker*, 2020 International Forum on Innovation and Emerging Industries Development, Shanghai, China, September 2020
- ⋈ *Keynote Speaker*, AERONEXT 2020 – Russian Drone Conference, Moscow, Russia, September 2020
- ⋈ *Invited Speaker*, Shanghai University League's Forum for International Young Scholars, Shanghai, China, May 2020
- ⋈ *Keynote Speaker*, 2019 World Robot Conference, Beijing, China, August 2019
- ⋈ *Plenary Speaker*, 2019 TCCT Workshop on Cooperative Control and Multi-Agent Systems, Shanghai, China, August 2019
- ⋈ *Keynote Speaker*, 34th Youth Academic Annual Conference of Chinese Association of Automation, Jinzhou, China, June 2019
- ⋈ *Keynote Speaker*, 31st Chinese Control and Decision Conference, Nanchang, China, June 2019
- ⋈ *Keynote Speaker*, 2019 International Workshop on Intelligent Systems and Control, Ningbo, China, April 2019
- ⋈ *Plenary Speaker*, Forum on the Frontiers of Information Technology and Electronic Engineering, Chinese Academy of Engineering, Beijing, China, March 2019
- ⋈ *Keynote Speaker*, Inaugural Meeting of the Intelligent Manufacturing Industry Society, Chinese Mechatronic Association, Shenzhen, China, December 2018
- ⋈ *Keynote Speaker*, 2018 Unmanned Systems & Intelligent Manufacturing Summit, Shanghai, China, September 2018
- ⋈ *Plenary Speaker*, 2018 IEEE/CSAA Guidance, Navigation and Control Conference, Xiamen, China, August 2018
- ⋈ *Keynote Speaker*, 2018 IEEE International Conference on Advanced Robotics and Mechatronics, Singapore, July 2018
- ⋈ *Plenary Speaker*, 2018 Symposium on Autonomous Systems, Chongqing, China, May 2018

- ⋈ *Semi-plenary Speaker*, 2017 Asian Control Conference, Gold Coast, Australia, December 2017
- ⋈ *Plenary Speaker*, Global Unmanned Systems Conference 2017, Zhuhai, China, December 2017
- ⋈ *Keynote Speaker*, 2017 International Conference on Computer and Drone Applications, Kuching, Malaysia, November 2017
- ⋈ *Speaker*, 4th World Congress on Robotics and Artificial Intelligence, Osaka, Japan, October 2017
- ⋈ *Keynote Speaker*, 2017 International Micro Air Vehicles Conference and Competition, Toulouse, France, September 2017
- ⋈ *Keynote Speaker*, 2016 International Conference on Electrical, Electronic, Communication and Control Engineering, Johor Bahru, Malaysia, December 2016
- ⋈ *Keynote Speaker*, ETAI 2016 Conference, Struga, Macedonia, September 2016
- ⋈ *Keynote Speaker*, 12th International Conference on Intelligent Unmanned Systems, Xi'an, China, August 2016
- ⋈ *UAV Forum Speaker*, 2015 Chinese Conference on Intelligent Equipment and Robotic Industry Development, Guangzhou, China, June 2016
- ⋈ *Keynote Speaker*, 2015 China Trade about International Unmanned Vehicle Systems, Shenzhen, China, November 2015
- ⋈ *Keynote Speaker*, The Commercial UAV Show 2015, London, U.K., October 2015
- ⋈ *Keynote Speaker*, 10th International Conference on Conference on Computer Science and Education, Cambridge, U.K., July 2015
- ⋈ *Keynote Speaker*, 3rd Singapore-French Symposium, Singapore, February 2015
- ⋈ *Keynote Speaker*, 10th International Conference on Intelligent Unmanned Systems, Montreal, Canada, September 2014
- ⋈ *Keynote Speaker*, 2014 Workshop on Distributed Cooperative Control of Multi-Agent Dynamic Systems, Beijing, China, July 2014
- ⋈ *Plenary Speaker*, 2014 Defence R&T Seminar, Nanyang Technological University, Singapore, May 2014
- ⋈ *Keynote Speaker*, 2013 Workshop on Distributed Cooperative Control of Multi-Agent Dynamic Systems, Beijing, China, July 2013
- ⋈ *Keynote Speaker*, 2013 International Conference on Unmanned Aircraft Systems, Atlanta, USA, May 2013
- ⋈ *Plenary Speaker*, SMi's 12th Annual Conference on Unmanned Aerial Systems 2012, London, U.K., October 2012
- ⋈ *Keynote Speaker*, 2012 China Guidance, Navigation and Control Congress, Beijing, China, August 2012
- ⋈ *Keynote Speaker*, 2012 Workshop on Distributed Coordinated Control of Dynamic Multi-Agent Systems, Beijing, China, July 2012
- ⋈ *Distinguished Robotics and Mechatronics Lecturer*, Singapore Robotic Games, Singapore, February 2012
- ⋈ *Plenary Speaker*, 2012 International Conference on Autonomous Unmanned Vehicles, Bangalore, India, February 2012

- ⋈ *Plenary Speaker*, 23rd Canadian Congress of Applied Mechanics, Vancouver, Canada, June 2011
- ⋈ *Plenary Speaker*, 13th IASTED International Conference on Control & Applications, Vancouver, Canada, June 2011
- ⋈ *Semi-Plenary Speaker*, 23rd Chinese Control and Decision Conference, Mianyang, China, May 2011
- ⋈ *Plenary Speaker*, 29th Chinese Control Conference, Beijing, China, July 2010
- ⋈ *Keynote Speaker*, 2nd International Conference on Control, Instrumentation & Mechatronic Engineering, Malacca, Malaysia, June 2009
- ⋈ *Plenary Speaker*, Unmanned Systems Asia 2009, Singapore, February 2009
- ⋈ *Keynote Speaker*, 2008 IEEE International Conference on Automation & Logistics, Qingdao, China, September 2008
- ⋈ *Keynote Speaker*, International Colloquium on Computing, Communication, Control & Management, Guangzhou, China, August 2008

Plenary Panelists at International Conferences

- ⋈ *Plenary Panel Chair*, 43nd Chinese Control Conference, Kunming, China, 2024
- ⋈ *Plenary Panel Chair*, 2024 Workshop on Autonomous Intelligent Unmanned Systems, Shanghai, China, 2024
- ⋈ *Plenary Panel Chair*, 42nd Chinese Control Conference, Tianjin, China, 2023
- ⋈ *Plenary Panel Chair*, 41st Chinese Control Conference, Hefei, China, 2022
- ⋈ *Plenary Panelist*, 12th International Micro Air Vehicle Conference and Competition, Puebla, Mexico (Online), 2021
- ⋈ *Plenary Panel Chair*, 40th Chinese Control Conference, Shanghai, China, 2021
- ⋈ *Plenary Panel Chair*, 39th Chinese Control Conference, Shenyang, China (Online), 2020
- ⋈ *Plenary Panel Chair*, 16th IEEE International Conference on Control and Automation, Sapporo, Japan (Online), 2020
- ⋈ *Plenary Panel Chair*, 38th Chinese Control Conference, Guangzhou, China, 2019
- ⋈ *Plenary Panel Chair*, 15th IEEE International Conference on Control and Automation, Edinburgh, Scotland, 2019
- ⋈ *Plenary Panelist*, the 15th International Conference on Control, Automation, Robotics and Vision, Singapore, 2018
- ⋈ *Plenary Panel Chair*, 37th Chinese Control Conference, Wuhan, China, 2018
- ⋈ *Forum Panelist*, The Commercial UAV Show Asia 2016, Singapore, 2016
- ⋈ *Plenary Panelist*, 35th Chinese Control Conference, Chengdu, China, 2016
- ⋈ *Plenary Panelist*, 13th International Conference on Control, Automation, Robotics and Vision, Singapore, 2014
- ⋈ *Plenary Panel Chair*, 11th IEEE International Conference on Control and Automation, Taichung, Taiwan, 2014

- ⋈ *Plenary Panelist*, 10th World Congress on Intelligent Control and Automation, Beijing, China, 2012
- ⋈ *Plenary Panelist*, 8th Asian Control Conference, Kaohsiung, Taiwan, 2011
- ⋈ *Plenary Panel Chair*, 29th Chinese Control Conference, Beijing, China, 2010
- ⋈ *Plenary Panel Chair*, 27th Chinese Control Conference, Kunming, China, 2008
- ⋈ *Plenary Panel Chair*, 3rd International Conference on Computer Science and Education, Kaifeng, China, 2008
- ⋈ *Plenary Panelist*, 26th Chinese Control Conference, Zhangjiajie, China, 2007
- ⋈ *Plenary Panelist*, 1st International Conference on Computer Science and Education, Xiamen, China, 2006

⋆ ⋆ ⋆ *For information on my international conference activities, invited talks, workshops, short courses, and other activities, please visit my personal website at www.bmchen.net.*