

Curriculum Vitae

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Contact Information

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Education

University of Washington, Ph.D.	09/1998-06/2004
University of California, Los Angeles, Ph.D program	09/1997-04/1998
National Taiwan Normal University, M.Sc.	09/1990-06/1993
National Taiwan Normal University, B.Sc.	09/1985-06/1990

Academic Experiences

- Dean, College of Science, National Taiwan Normal University, 08/2022 - 07/2025.
- Panel Member, MOE Teaching Practice Research Program, Ministry of Education, Taiwan, 01/2022 - 12/2024.
- Scientific Member, Mathematics Division, National Center for Theoretical Sciences, Taiwan, 01/2018 - 12/2020.
- Visiting Scholar, School of Mathematical Sciences, University of Southampton, UK, 07/2017 - 08/2017 and 07/2018.
- Chairman, Department of Mathematics, National Taiwan Normal University, 08/2013 - 07/2017.
- Visiting Scholar, Department of Mathematics, University of Würzburg, Germany, 08/2013 - 10/2013.
- Distinguished Professor, Department of Mathematics, National Taiwan Normal University, 01/2012 - 12/2017 and 01/2022 - 12/2027.
- Professor, Department of Mathematics, National Taiwan Normal University, since 02/2012.
- Panel Member, Mathematics Research Promotion Center, National Science Council of Taiwan, 01/2009 - 12/2011.
- Visiting Scholar, Department of Mathematics, University of Washington, USA, 06/2008 - 09/2008.

- Associate Professor, Department of Mathematics, National Taiwan Normal University, 08/2007 - 01/2012.
- Assistant Professor, Department of Mathematics, National Taiwan Normal University, 08/2004 - 07/2007.

Awards and Recognitions

- Distinguished Alumni, Jhong Jhou Primary School, Tainan (03/2021).
- Distinguished Alumni, Kang Ming Senior High School, Tainan (10/2018).
- Distinguished Professor, National Taiwan Normal University (2012-2017, 2022-2027).
- Award of Salary Promotion for Excellent Researcher, National Taiwan Normal University (2010-2024).
- Excellent Researcher Award, College of Science, National Taiwan Normal University (2009-2014).

Research Interests

- Continuous Optimization, Nonsmooth Analysis, Operations Research.

Monographs

1. J.-S. Chen, *SOC Functions and Their Applications*, Springer Optimization and Its Applications 143, Springer Nature, Singapore, 2019.

Journal papers (ORCID: 0000-0002-4596-9419)

1. V.M. Tam and J.-S. Chen, On the D-gap functions for variational-hemivariational inequalities with an application to contact mechanics, to appear in *Pacific Journal of Optimization*, 2025.
2. X. Chi, Y. Yang, and J.-S. Chen, Complexity analysis of a predictor-corrector interior-point algorithm for $P_*(\kappa)$ -weighted linear complementarity problems, to appear in *Journal of Industrial and Management Optimization*, DOI: 10.3934/jimo.2024102, 2024.
3. L.T. Nguyen, Y.-L. Chang, C.-C. Hu, and J.-S. Chen, Optimality and KKT conditions for interval valued optimization problems on Hadamard manifolds, to appear in *Optimization*, DOI: 10.1080/02331934.2024.2375424, 2024.
4. Y. Lu, H.-M. Ma, D.-Y. Xue, and J.-S. Chen, Augmented Lagrangian method for nonlinear circular conic programs: a local convergence analysis, to appear in *Optimization*, DOI: 10.1080/02331934.2024.2370426, 2024.

5. J.H. Alcantara, C.T. Nguyen, T. Okuno, A. Takeda, and J.-S. Chen, Unified smoothing approach for best hyperparameter selection problem using a bilevel optimization strategy, to appear in *Mathematical Programming*, DOI: 10.1007/s10107-024-02113-z, 2024.
6. V.M. Tam and J.-S. Chen, An inverse problem for a class of quasi-hemivariational inequalities on constant curvature Hadamard manifolds, to appear in a special issue of *Journal of Nonlinear and Convex Analysis*, 2024.
7. V.M. Tam and J.-S. Chen, Hölder continuity and upper bound results for generalized parametric elliptical variational-hemivariational inequalities, *Journal of Nonlinear and Variational Analysis*, vol. 8, no. 2, pp. 315-332, 2024.
8. V.M. Tam and J.-S. Chen, Upper bounds for vector equilibrium problems associated with a p -order cone on Hadamard manifolds, *Journal of Nonlinear and Convex Analysis*, vol. 24, no. 12, pp. 2593-2609, 2023.
9. V.M. Tam and J.-S. Chen, Upper error bounds of DG-functions for history-dependent variational-hemivariational inequalities, *Applied Set-Valued Analysis and Optimization*, vol. 5, no. 3, pp. 347-367, 2023.
10. L.T. Nguyen, Y.-L. Chang, C.-C. Hu, and J.-S. Chen, Interval optimization problems on Hadamard manifolds, *Journal of Nonlinear and Convex Analysis*, vol. 24, no. 11, pp. 2489-2511, 2023.
11. J.-Y. Tang, J.-C. Zhou, J.H. Alcantara, and J.-S. Chen, A family of smooth NCP functions and an inexact Levenberg-Marquardt method for nonlinear complementarity problems, *Journal of Nonlinear and Convex Analysis*, vol. 24, no. 11, pp. 2361-2385, 2023.
12. Y. Lu, H.-M. Ma, D.-Y. Xue, and J.-S. Chen, Absolute value equations with data uncertainty in the l_1 and l_∞ norm balls, *Journal of Nonlinear and Variational Analysis*, vol. 7, no. 4, pp. 549-561, 2023.
13. Y.-L. Chang, C.-Y. Yang, C.T. Nguyen, and J.-S. Chen, Novel constructions of complementarity functions associated with symmetric cones, *Journal of Nonlinear and Convex Analysis*, vol. 24, no. 3, pp. 575-606, 2023.
14. J.H. Alcantara, J.-S. Chen, and Matthew K. Tam, Method of alternating projections for the general absolute value equation, *Journal of Fixed Point Theory and Applications*, vol. 25, no. 1, Article 39, 2023.
15. Y.-L. Chang, C.-C. Hu, C.-Y. Yang, and J.-S. Chen, Hadamard product on quaternion Hermitian matrices, *Linear and Nonlinear Analysis*, vol. 8, no. 3, pp. 265-275, 2022.
16. C. Wu, X. Chen, Q. Jin, and J.-S. Chen, Applying smoothing technique and semi-proximal ADMM for image deblurring, *Calcolo*, vol. 59, no. 4, Article 40, 2022.
17. S.-W. Li, Y.-L. Chang, and J.-S. Chen, Plane section curves on surfaces of NCP functions, *Axioms*, vol. 11, no. 10, Article 557, 2022.
18. J. Shen, J.-S. Chen, H.-D. Qi, and N. Xiu, A penalized method of alternating projections for weighted low-rank Hankel matrix optimization, *Mathematical Programming Computation*, vol. 14, no. 3, pp. 417-450, 2022.

19. Z. Hao, C.T. Nguyen, and J.-S. Chen, An approximate lower order penalty approach for solving second-order cone linear complementarity problems, *Journal of Global Optimization*, vol. 83, no. 4, pp. 671-697, 2022.
20. J.H. Alcantara and J.-S. Chen, A new class of neural networks for NCPs using smooth perturbations of the natural residual function, *Journal of Computational and Applied Mathematics*, vol. 407, June, Article 114092, 2022.
21. X.-H. Miao, K. Yao, C.-Y. Yang, and J.-S. Chen, Levenberg-Marquardt method for absolute value equation associated with second-order cone, *Numerical Algebra, Control and Optimization*, vol. 12, no. 1, pp. 47-61, 2022.
22. X.-H. Miao and J.-S. Chen, A semi-distance and proximal distance associated with symmetric cone, *Journal of Nonlinear and Convex Analysis*, vol. 23, no. 2, pp. 241-250, 2022.
23. W.-M. Hsu, X.-H. Miao, and J.-S. Chen, The solvabilities of eigenvalue optimization problems associated with p -order cone and circular cone, *Linear and Nonlinear Analysis*, vol. 7, no. 3, pp. 337-353, 2021.
24. Y.-L. Chang, C.-C. Hu, C.-Y. Yang, and J.-S. Chen, Characterizations of boundary conditions on some non-symmetric cones, *Numerical Functional Analysis and Optimization*, vol. 42, no. 13, pp. 1572-1585, 2021.
25. J.-H. Sun, W.-C. Fu, J.H. Alcantara, and J.-S. Chen, A neural network based on the metric projector for solving SOCCVI problem, *IEEE Transactions on Neural Networks and Learning Systems*, vol. 32, no. 7, pp. 2886-2900, 2021.
26. X.-H. Miao, W.-M. Hsu, C.T. Nguyen, and J.-S. Chen, The solvabilities of three optimization problems associated with second-order cone, *Journal of Nonlinear and Convex Analysis*, vol. 22, no. 5, pp. 937-967, 2021.
27. C. Wu, J. Wang, J.H. Alcantara, and J.-S. Chen, Smoothing strategy along with conjugate gradient algorithm for signal reconstruction, *Journal of Scientific Computing*, vol. 87, no. 1, Article 21, 2021.
28. X.-H. Miao and J.-S. Chen, On matrix characterizations for P -property of the linear transformation in second-order cone linear complementarity problems, *Linear Algebra and Its Applications*, vol. 613, March, pp. 271-294, 2021.
29. C.-H. Lee, C.-C. Hu, and J.-S. Chen, Using invertible functions to construct NCP functions, *Linear and Nonlinear Analysis*, vol. 6, no. 3, pp. 347-369, 2020.
30. X.-H. Miao, Y. Lu, and J.-S. Chen, Construction of merit functions for ellipsoidal cone complementarity problem, *Pacific Journal of Optimization*, vol. 16, no. 4, pp. 547-565, 2020.
31. J.H. Alcantara and J.-S. Chen, A novel generalization of the natural residual function and a neural network approach for the NCP, *Neurocomputing*, vol. 413, pp. 368-382, 2020.
32. C.-H. Huang, Y.-L. Chang, and J.-S. Chen, The P -class and Q -class functions on symmetric cones, *Journal of Nonlinear and Variational Analysis*, vol. 4, no. 2, pp. 273-284, 2020.

33. Y. Lu and J.-S. Chen, Smooth analysis on cone function associated with ellipsoidal cone, *Journal of Nonlinear and Convex Analysis*, vol. 21, no. 6, pp. 1327-1347, 2020.
34. J.H. Alcantara, C.-H. Lee, C.T. Nguyen, Y.-L. Chang, and J.-S. Chen, On construction of new NCP functions, *Operations Research Letters*, vol. 48, no. 2, pp. 115-121, 2020.
35. Y. Lu, C.-Y. Yang, J.-S. Chen, and H.-D. Qi, The decompositions of two core non-symmetric cones, *Journal of Global Optimization*, vol. 76, no. 1, pp. 155-188, 2020.
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39. C. Wu, J. Zhan, Y. Lu, and J.-S. Chen, Signal reconstruction by conjugate gradient algorithm based on smoothing l_1 -norm, *Calcolo*, vol. 56, no. 4, Article 42, 26 pages, December, 2019.
40. C.-H. Huang, Y.-L. Chang, and J.-S. Chen, Some inequalities on weighted means and trace associated with second-order cone, *Linear and Nonlinear Analysis*, vol. 5, no. 2, pp. 221-236, 2019.
41. C.-H. Huang, Y.-H. Hsiao, Y.-L. Chang, and J.-S. Chen, On Young Inequality under Euclidean Jordan Algebra, *Linear and Nonlinear Analysis*, vol. 5, no. 1, pp. 13-31, 2019.
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43. J.H. Alcantara and J.-S. Chen, Neural networks based on three classes of NCP-functions for solving nonlinear complementarity problems, *Neurocomputing*, vol. 359, September, pp. 102-113, 2019.
44. Y. Lu and J.-S. Chen, The variational geometry, projection expression and decomposition associated with ellipsoidal cones, *Journal of Nonlinear and Convex Analysis*, vol. 20, no. 4, pp. 715-738, 2019.
45. Y. Lu, J.-S. Chen, and N. Zhang, No gap second-order optimality conditions for circular conic programs, *Numerical Functional Analysis and Optimization*, vol. 40, no. 10, pp. 1113-1135, 2019.
46. C.-H. Huang and J.-S. Chen, On unitary elements defined on Lorentz cone and their applications, *Linear Algebra and Its Applications*, vol. 565, March, pp. 1-24, 2019.

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51. C.T. Nguyen, B. Saheya, Y.-L. Chang, and J.-S. Chen, Unified smoothing functions for absolute value equation associated with second-order cone, *Applied Numerical Mathematics*, vol. 135, January, pp. 206-227, 2019.
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53. P.-F. Ma, J.-S. Chen, C.-H. Huang, and C.-H. Ko, Discovery of new complementarity functions for NCP and SOCCP, *Computational and Applied Mathematics*, vol. 37, no. 5, pp. 5727-5749, 2018.
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63. X.-H. Miao, Y.-C. Lin, and J.-S. Chen, A note on the paper "The algebraic structure of the arbitrary-order cone", *Journal of Optimization Theory and Applications*, vol. 173, no. 3, pp. 1066-1070, 2017.
64. X.-H. Miao, Y.-L. Chang, and J.-S. Chen, On merit functions for p -order cone complementarity problem, *Computational Optimization and Applications*, vol. 67, no. 1, pp. 155-173, 2017.
65. J.-C. Zhou, J.-Y. Tang, and J.-S. Chen, Parabolic second-order directional differentiability in the Hadamard sense of the vector-valued functions associated with circular cones, *Journal of Optimization Theory and Applications*, vol. 172, no. 3, pp. 802-823, 2017.
66. C.-H. Huang, J.-S. Chen, and J. E. Martinez-Legaz, Differentiability v.s. convexity of complementarity functions, *Optimization Letters*, vol. 11, no. 1, pp. 209-216, 2017.
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69. X.-H. Miao, J.-S. Chen, and C.-H. Ko, A neural network based on the generalized FB function for nonlinear convex programs with second-order cone constraints, *Neurocomputing*, vol. 203, August, pp. 62-72, 2016.
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83. X.-H. Miao, J.-S. Chen, and C.-H. Ko, A smoothed NR neural network for solving nonlinear convex programs with second-order cone constraints, *Information Sciences*, vol. 268, June, pp. 255-270, 2014.
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147. J.-S. Chen, Two classes of merit functions for the second-order cone complementarity problem, *Mathematical Methods of Operations Research*, vol. 64, no. 3, pp. 495-519, 2006.
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149. J.-S. Chen, The convex and monotone functions associated with second-order cone, *Optimization*, vol. 55, no. 4, pp. 363-385, 2006.
150. J.-S. Chen, A new merit function and its related properties for the second-order cone complementarity problem, *Pacific Journal of Optimization*, vol. 2, no. 1, pp. 167-179, 2006.
151. J.-S. Chen and P. Tseng, An unconstrained smooth minimization reformulation of second-order cone complementarity problem, *Mathematical Programming*, vol. 104, no. 2-3, pp. 293-327, 2005.
152. J.-S. Chen, Alternative proofs for some results of vector-valued functions associated with second-order cone, *Journal of Nonlinear and Convex Analysis*, vol. 6, no. 2, pp. 297-325, 2005.
153. J.-S. Chen, X. Chen, and P. Tseng, Analysis of nonsmooth vector-valued functions associated with second-order cones, *Mathematical Programming*, vol. 101, no. 1, pp. 95-117, 2004.
154. Y.-H. Chang and J.-S. Chen, The almost periodic solutions of nonautonomous abstract differential equations, *Chinese Journal of Mathematics*, vol. 23, no. 3, pp. 257-274, 1995.

Conference/Workshop Talks

1. The 26th International Symposium on Mathematical Programming (ISMP 2024), Montreal Convention Center, Montreal, Canada, July 21-26, 2024.
2. 2024 International Workshop on Optimization Theory, Northeast Normal University, Changchun, China, May 4-5, 2024. (Invited speaker, online talk)
3. Workshop on Advances in Continuous Optimization 2023, The University of Tokyo, Tokyo, Japan, July 24-25, 2023. (Invited speaker)
4. The 50th Annual Convention of Mathematical Society of the Philippines (MSP), Ateneo de Manila University, Quezon City, Philippines, June 1-4, 2023. (**Plenary speaker**)
5. International Conference on Matrix Theory with Applications to Combinatorics, Optimization and Data Science (ICMTA 2022), Jeju Island, Korea, December 1-5, 2022. (**Plenary speaker**)

6. Data Science, Statistics & Visualisation 2022 (DSSV 2022), National Cheng Kung University, Tainan, Taiwan, June 27-29, 2022. (Invited speaker)
7. A workshop on Nonlinear Functional Analysis and Its Applications in memory of Professor Ronald E. Bruck, Department of Mathematics, The Technion - Israel Institute of Technology, Haifa, Israel, April 4-6, 2022. (Invited speaker, online talk)
8. The 18th EUROPT Workshop on Advances in Continuous Optimization (EUROPT 2021), Toulouse, France, July 7-9, 2021. (online talk)
9. International Forum on the Frontier Development of System Management Discipline, University of Shanghai for Science and Technology, Shanghai, China, December 22, 2020. (Invited speaker, online talk)
10. 2020 Annual Meeting of Taiwanese Mathematics Society, Department of Mathematics, Fu-Jen Catholic University, New Taipei City, Taiwan, December 5-6, 2020. (Invited speaker)
11. Shanghai University Leagues Forum for International Young Scholars, Shanghai, China, November 8, 2020. (Invited speaker, online talk)
12. 2019 Annual Meeting of Taiwanese Mathematics Society, Department of Applied Mathematics, National Chung Hsing University, Taichung, Taiwan, December 7-8, 2019. (Invited speaker)
13. International Conference on Nonlinear Analysis and Convex Analysis and International Conference on Optimization: Techniques and Applications (NACA-ICOTA2019), Hakodate, Japan, August 26–31, 2019. (**Distinguished Lecture**)
14. The 3rd International Conference on Science and Science Education (3rd IConSSE 2019), Universitas Kristen Satya Wacana, Indonesia, June 20-21, 2019. (**Keynote speaker**)
15. The 8th International Congress of Chinese Mathematicians (ICCM 2019), Tsinghua University, Beijing, China, June 9-14, 2019. (Invited speaker)
16. Advances in the Geometric and Analytic Theory of Convex Cones, Jeju Island, Korea, May 27-31, 2019. (Invited speaker)
17. International Conference on Matrix Theory and Applications (2019 ICMTA): Combinatorics, Optimization, Data Sciences, Jeju National University, Korea, May 23-27, 2019. (Invited speaker)
18. International Conference on Optimization under Risk in the Era of Big Data(ICOR 2019), Business School, Central South University, Changsha, China, May 12-13, 2019. (**Keynote speaker**)
19. International Workshop on Variational Analysis and Related Topics, Hanoi Pedagogical University 2, Vinh Phuc, Vietnam, December 13-15, 2018. (Invited speaker)
20. The Sixth Conference on Nonlinear Analysis and Optimization (NAO2018), Onnason, Okinawa, Japan, November 5-9, 2018. (**Keynote speaker**)

21. Joint Mini-workshop between KU and NTNU, Ito campus, Kyushu University, Japan, October 22, 2018. (Invited speaker)
22. 2018 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, August 27-29, 2018. (Invited speaker)
23. International Workshop on Nonlinear Analysis and Optimization 2018, Pukyong National University, Busan, Korea, August 6-8, 2018. (Invited speaker)
24. International Workshop on Big Data and Optimization, Applied Algebra and Optimization Research Center, Sungkyunkwan University, Suwon, Korea, December 14-17, 2017. (Invited speaker)
25. 2017 Annual Meeting of Taiwanese Mathematics Society, Department of Applied Mathematics, National Chiayi University, Chiayi, Taiwan, December 9-10, 2017. (Invited speaker)
26. 2017 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, August 30 - September 1, 2017. (Invited speaker)
27. The 10th International Conference on Nonlinear Analysis and Convex Analysis, Chitose city, Hokkaido, Japan, July 4-9, 2017. (**Keynote speaker**)
28. The 5th TWSIAM Annual Meeting, Department of Mathematical Sciences, National Cheng Chi University, Taipei, Taiwan, May 6-7, 2017. (Invited speaker)
29. 2016 Annual Meeting of Taiwanese Mathematics Society, Department of Applied Mathematics, National Dong Hua University, Hualien, Taiwan, December 10-11, 2016. (Invited speaker)
30. The Frontier Conference of Optimization and Its Applications, Fuzhou University, China, November 19-20, 2016. (Invited speaker)
31. The 28th Symposium of the Research Association of Mathematical Programming, Niigata University, Niigata, Japan, October 13-14, 2016. (Invited speaker)
32. The fifth International Conference on Continuous Optimization, National Graduate Institute for Policy Studies, Tokyo, Japan, August 6-11, 2016. (Invited speaker)
33. The fifth Asian Conference on Nonlinear Analysis and Optimization, Toki Messe, Niigata, Japan, August 1-6, 2016. (Invited speaker)
34. 2015 NCTS Workshop on Analysis at NCU, Department of Mathematics, National Central University, December 28-29, 2015. (Invited speaker)
35. 2015 Nanjing International Conference on Numerical Optimization with Applications, Nanjing Normal University, Nanjing, China, November 27-29, 2015. (Invited speaker)
36. The 4th International Congress on Natural Sciences, National Changhua University of Education, Changhua, Taiwan, September 10-12, 2015. (Invited speaker)
37. 2015 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, September 7-9, 2015. (Invited speaker)
38. 2015 Canadian Mathematical Society Summer Meeting, University of Prince Edward Island, Charlottetown, Canada, June 5-8, 2015. (Invited speaker)

39. 2015 Workshop on Nonlinear Analysis and Optimization, National Chiayi University, Chiayi, Taiwan, April 28, 2015. (Invited speaker)
40. International Workshop on Nonlinear Analysis, Optimization, and Applications, Pukyong National University, Busan, Korea, February 11-13, 2015. (Invited speaker)
41. 2014 Annual Meeting of Taiwanese Mathematics Society, Department of Mathematics, National Cheng Kung University, Tainan, Taiwan, December 6-7, 2014. (Invited speaker)
42. 2013 Workshop on Nonlinear Analysis, Optimization and Their Applications, Department of Mathematics, National Kaohsiung Normal University, Kaohsiung, Taiwan, December 30, 2013. (Invited speaker)
43. The International Conference on Nonlinear Analysis and Optimization, Department of Applied Mathematics, National Sun Yat-sen University, Kaohsiung, Taiwan, December 20-22, 2013. (Invited speaker)
44. The 9th International Conference on Optimization: Techniques and Applications - ICOTA9, National Taiwan University of Science and Technology, Taipei, Taiwan, December 12-16, 2013.
45. 2013 Annual Meeting of Taiwanese Mathematics Society, Department of Applied Mathematics, National Sun Yat-sen University, Kaohsiung, Taiwan, December 6-8, 2013. (Invited speaker)
46. The 7th Asian Conference on Fixed Point Theory and Optimization 2013, Kamphang Saen Campus, Kasetsart University, Thailand, July 18-20, 2013. (**Keynote speaker**)
47. 2013 International Symposium on Nonlinear Analysis and Optimization, Pukyong National University, Busan, Korea, January 31 - February 2, 2013. (Invited speaker)
48. 2012 Annual Meeting of Taiwanese Mathematics Society, National Chiao Tung University, Hsinchu, Taiwan, December 7-9, 2012. (Invited speaker)
49. The 21st International Symposium on Mathematical Programming (ISMP 2012), Berlin Institute of Technology, Berlin, Germany, August 19-24, 2012.
50. 2012 Annual Meeting of Shandong Operations Research Society, Qufu Normal University, Shandong, China, July 21-22, 2012. (Invited speaker)
51. 2012 International Workshop on Optimization and Engineering Systems, National Cheng Kung University, Tainan, Taiwan, June 27-30, 2012. (Invited speaker)
52. 2012 Annual Meeting of Hong Kong Mathematics Society, The University of Hong Kong, Hong Kong, China, May 5, 2012. (Invited speaker)
53. International Conference on Jordan Theory, Analysis and Related Topics, The Chinese University of Hong Kong, Hong Kong, China, April 30 - May 4, 2012. (Invited speaker)
54. 2012 International Symposium on Nonlinear Analysis and Optimization, Pukyong National University, Busan, Korea, February 8-10, 2012. (Invited speaker)

55. 2011 Workshop on Nonlinear Analysis and Optimization Theory, Method and Applications, National Tsing Hua University, Hsinchu, Taiwan, December 12, 2011. (Invited speaker)
56. 2011 Annual Meeting of Taiwanese Mathematics Society, Chung Yuan Christian University, Chungli, Taiwan, December 9-11, 2011. (Invited speaker)
57. 2011 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, August 29-31, 2011. (Invited speaker)
58. The 7th International Conference on Nonlinear Analysis and Convex Analysis, Pukyong National University, Busan, Korea, August 2-5, 2011. (Invited speaker)
59. 2011 Workshop on Analysis and Optimization, Chung Yuan Christian University, Chungli, Taiwan, March 30, 2011. (Invited speaker)
60. International Symposium on Nonlinear Analysis and Convex Analysis Hualien, Taiwan, March 26-28, 2011. (Invited speaker)
61. 2010 Annual Meeting of Taiwanese Mathematics Society, National Changhua University of Education, Changhua, Taiwan, December 10-12, 2010. (Invited speaker)
62. 2010 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, August 30 - September 1, 2010. (Invited speaker)
63. The International Workshop on Large Scale Optimization, Fudan University, Shanghai, China, May 21, 2010. (Invited speaker)
64. 2010 NCTS Colloquium on Jordan Theory and Analysis, National Tsing Hua University, Hsinchu, Taiwan, April 8-12, 2010. (Invited speaker)
65. 2010 Workshop on Optimization Analysis and its Applications, Chung Yuan Christian University, Chungli, Taiwan, March 19-20, 2010. (Invited speaker)
66. 2009 Annual Meeting of Taiwanese Mathematics Society, National Chung Cheng University, Chiayi, Taiwan, December 4-6, 2009. (Invited speaker)
67. Workshop on Theory and Applications of Mathematical Analysis, National Taiwan University, Taipei, Taiwan, October 21-22, 2009. (Invited speaker)
68. The 6th International Conference on Nonlinear Analysis and Convex Analysis, Tokyo Institute of Technology, Tokyo, Japan, March 27-31, 2009.
69. 2008 Annual Meeting of Taiwanese Mathematics Society, National Tsing Hua University, Hsinchu, Taiwan, December 19-21, 2008.
70. 2008 Workshop on Nonlinear Analysis, Department of Mathematics, National Kaohsiung Normal University, Kaohsiung, Taiwan, November 21, 2008. (Invited speaker)
71. 2008 Workshop on Analysis, Department of Mathematics, National Central University, Chungli, Taiwan, October 25, 2008. (Invited speaker)
72. The 7th International Conference on Optimization: Techniques and Applications - ICOTA7, Kobe, Japan, December 12-15, 2007.

73. International Symposium on Nonlinear Analysis and Convex Analysis, Department of Applied Mathematics, National Sun Yat-Sen University, Kaohsiung, Taiwan, November 22-24, 2007.
74. 2007 Management Summit and Scholar Workshop, Management II Program, National Science Council, Taipei, Taiwan, June 24-26, 2007.
75. The 5th International Conference on Nonlinear Analysis and Convex Analysis, National Tsing Hua University, Hsinchu, Taiwan, May 31 - June 4, 2007.
76. Workshop on Duality and Conic Optimization, Fang Shu-Cherng Lecturership, Tsinghua University, Beijing, China, December 16-18, 2006. (Invited speaker)
77. 2006 INFORMS Annual Meeting, Pittsburgh, Pennsylvania, USA, November 5-8, 2006.
78. Conference on Mathematical Analysis for Young Researchers, National Chang-Hua University of Education, Changhua, Taiwan, October 14-15, 2006. (Invited speaker)
79. 2006 RIMS Workshop on Nonlinear Analysis and Convex Analysis, Kyoto University, Kyoto, Japan, August 28-30, 2006. (Invited speaker)
80. 2006 Distinguished Scholar Workshop, Management II Program, National Science Council, Taipei, Taiwan, July 10-15, 2006.
81. TMS & AMS Joint International Conference, Tunghai University, Taichung, Taiwan, December 14-18, 2005.
82. The 3rd Sino-Japanese Optimization Meeting, National University of Singapore, Singapore, October 31 - November 2, 2005.
83. International Conference on Nonlinear Analysis and Optimization with Its Applications, Chung Yuan Christian University, Chungli, Taiwan, September 30 - October 3, 2005. (Invited speaker)
84. The 4th International Conference on Nonlinear Analysis and Convex Analysis, Okinawa, Japan, June 30 - July 4, 2005.
85. NCTS Workshop on Functional Analysis, National Sun Yat-Sen University, Kaohsiung, Taiwan, December 25-28, 2004.
86. Workshop on Nonlinear Analysis and Neural Nets, National Taiwan Normal University, Taipei, Taiwan, December 24-25, 2004.
87. The 6th International Conference on Optimization: Techniques and Applications - ICOTA6, University of Ballarat, Australia, December 9-11, 2004.
88. 2004 Annual Meeting of Taiwanese Mathematics Society, National Taiwan University, Taipei, Taiwan, December 3-5, 2004.
89. Conference of Multiscale Optimization Methods and Applications, University of Florida, Gainesville, February 26-28, 2004.
90. International Teaching Assistant Pre-Autumn Workshop, University of Washington, Seattle, September 16, 2002.

91. International Teaching Assistant Pre-Autumn Workshop, University of Washington, Seattle, September 18, 2001.
92. International Conference on Optimization and Control, National Cheng Kung University, Tainan, Taiwan, June 2-4, 2001.

Colloquium/Seminar Talks

1. Seminar of Faculty of Mathematics, Mechanics and Informatic, Vietnam National University - University of Science, Hanoi, Vietnam, March 29, 2024.
2. Seminar of School of Mathematics and Statistics, University of Melbourne, Melbourne, Australia, January 29, 2024.
3. Seminar of Institute of Innovation, Science and Sustainability, Federation University Australia, Ballarat, Australia, January 25, 2024. (online talk)
4. Colloquium of Faculty of Mathematics, The University of Danang - University of Science and Education, Danang, Vietnam, February 10, 2023.
5. Colloquium of Academy for Advanced Interdisciplinary Studies, Northeast Normal University, China. July 6, 2022. (online talk)
6. Seminar of Institute of Statistical Science, Academia Sinica, Taipei, Taiwan, January 10, 2022.
7. Colloquium of Department of Mathematical Sciences, National Cheng Chi University, Taipei, Taiwan, October 4, 2021.
8. OR Forum Series, Operations Research Society of China, Beijing, China, September 1, 2021. (online talk)
9. Colloquium of Department of Mathematics, National Cheng Kung University, Tainan, Taiwan, November 12, 2020.
10. UMBC Online Optimization Seminar, University of Maryland, Baltimore, USA, September 17, 2020. (online talk)
11. Webinar of Variational Analysis and Optimization, Group of Computation and Optimization, Australia, August 26, 2020. (online talk)
12. Colloquium of Faculty of Mathematics, The University of Danang - University of Science and Education, Danang, Vietnam, December 11, 2019.
13. Seminar of School of Mathematics and Statistics, Ningxia University, Yinchuan, China, October 11, 2019.
14. Colloquium of School of Mathematics and Information Science, North Minzu University, Yinchuan, China, October 9, 2019.
15. Seminar of Mathematical Informatics 5th Lab, University of Tokyo, Tokyo, Japan, September 24, 2019.
16. Seminar of Department of Mathematical Sciences, Tsinghua University, Beijing, China, June 12, 2019.

17. Seminar of Department of Applied Mathematics, Beijing Jiaotong University, Beijing, China, June 12, 2019.
18. Seminar of Department of Mathematics, Shanghai University, Shanghai, China, April 26, 2019.
19. Colloquium of School of Management, Shanghai University, Shanghai, China, April 25, 2019.
20. Seminar of Department of Mathematics, Naresuan University, Thailand, February 27-28, 2019.
21. Seminar of School of Mathematical Sciences, University of Southampton, UK, January 31, 2019.
22. Colloquium of School of Mathematics and Statistics, Wuhan University, Wuhan, China, September 20, 2018.
23. Colloquium of School of Mathematical Sciences, Inner Mongolia Normal University, Hohhot, China, September 6, 2018.
24. Colloquium of School of Mathematical Sciences, Dalian University of Technology, Dalian, China, October 13, 2017.
25. Colloquium of School of Sciences, Shenyang Aerospace University, Shenyang, China, October 11, 2017.
26. Seminar of School of Mathematical Sciences, University of Southampton, UK, August 8, 2017.
27. Seminar of Department of Mathematics, National University of Singapore, Singapore, January 24, 2017.
28. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 9, 2016.
29. Seminar of Department of Mathematics, Shanghai University, Shanghai, China, November 24, 2015.
30. Seminar of Department of Economics, Universitat Autònoma de Barcelona, Spain, February 19, 2015.
31. Seminar of Department of Mathematics, University of Würzburg, Würzburg, Germany, September 10, 2013.
32. Colloquium of Department of Mathematical Sciences, National Chengchi University, Taipei, Taiwan, October 8, 2012.
33. Seminar of Institute of Computational Mathematics and Scientific/Engineering Computing, Chinese Academy of Sciences, Beijing, China, July 27, 2012.
34. Seminar of Department of Mathematics, Tianjin University, Tianjin, China, July 25, 2012.
35. Colloquium of Department of Mathematics, Soochow University, Taipei, Taiwan, May 11, 2011.

36. Seminar of Department of Mathematical Sciences, Nanyang Technological University, Singapore, October 7, 2010.
37. Seminar of Department of Mathematics, National University of Singapore, Singapore, October 6, 2010.
38. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, September 29, 2010.
39. Colloquium of Department of Applied Mathematics, Beijing Jiaotong University, Beijing, China, May 17, 2010.
40. Colloquium of School of Mathematical Sciences, Dalian University of Technology, Dalian, China, January 18, 2010.
41. Colloquium of School of Mathematical Sciences, South China University of Technology, Guangzhou, China, January 14, 2010.
42. Colloquium of Department of Applied Mathematics, National University of Kaohsiung, Kaohsiung, Taiwan, December 9, 2009.
43. Seminar of Mathematics Division, NCTS (South), National Cheng Kung University, Tainan, Taiwan, September 29, 2009.
44. Colloquium of Department of Applied Mathematics, National Dong Hwa University, Hualien, Taiwan, June 19, 2009.
45. Seminar of Division of Mathematical Sciences, Pukyong National University, Busan, Korea, April 3, 2009.
46. Seminar of Department of Mathematics, Kyungpook National University, Daegu, Korea, April 2, 2009.
47. Seminar of Mathematics Division, NCTS(South), National Cheng Kung University, Tainan, Taiwan, January 9, 2009.
48. Colloquium of Department of Mathematics, National Taitung University, Taitung, Taiwan, June 6, 2008.
49. Colloquium of Department of Mathematics, South China University of Technology, Guangzhou, China, March 20, 2008.
50. Colloquium of Department of Mathematics, Tianjin University, Tianjin, China, March 17 and 18, 2008.
51. Colloquium of Department of Applied Mathematics, Beijing Jiaotong University, Beijing, China, March 12 and 14, 2008.
52. Seminar of Department of Applied Mathematics, The Hong Kong Polytechnic University, Hong Kong, March 10, 2008.
53. Colloquium of Department of Applied Mathematics, National Sun Yat-Sen University, Kaohsiung, Taiwan, March 15, 2007.
54. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 7, 2007.

55. Seminar of Department of Computer Science and Information Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan, December 26-27, 2006.
56. Colloquium of Department of Mathematics, Beijing Jiaotong University, China, December 19, 2006.
57. Seminar of Department of Decision Sciences, National University of Singapore, Singapore, October 6, 2006.
58. Colloquium of Department of Mathematics, National Tsing Hua University, Hsinchu, Taiwan, April 17, 2006.
59. Seminar of Department of Computer Science and Information Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan, December 20, 2005.
60. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, September 14, 2005.
61. Colloquium of Department of Mathematics, National Taiwan University, Taipei, Taiwan, November 22, 2004.
62. Colloquium of Department of Applied Mathematics, National Dong Hwa University, Hualien, Taiwan, April 2, 2004.
63. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 31, 2004.
64. Colloquium of Department of Mathematics, Tunghai University, Taichung, Taiwan, March 29, 2004.
65. Colloquium of Department of Mathematics, National Cheng Kung University, Tainan, Taiwan, March 26, 2004.
66. Colloquium of Department of Applied Mathematics, National Sun Yat-Sen University, Kaohsiung, Taiwan, March 25, 2004.
67. Colloquium of Department of Mathematics, National Kaohsiung Normal University, Kaohsiung, Taiwan, March 24, 2004.
68. Joint UW Optimization Seminar, University of Washington, Seattle, May 6, 2003.
69. Joint UW Optimization Seminar, University of Washington, Seattle, April 16, 2002.
70. Colloquium of Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, May 29, 2001.

Professional Activities

1. Organizer, 2024 Optimization Workshop, Department of Mathematics, National Taiwan Normal University, August 19, 2024.
2. Co-organizer, 2023 TWSIAM Annual Meeting, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, May 20-21, 2023.

3. Organizer, 2023 NCTS Optimization Workshop, Department of Mathematics, National Taiwan Normal University, May 17, 2023.
4. Organizer, 2020 NCTS Optimization Day for Young Researchers, Department of Mathematics, National Taiwan Normal University, December 14, 2020.
5. Co-organizer, Taiwan-Germany Symposium on Mathematics Education, Department of Mathematics, National Taiwan Normal University, November 18-19, 2019.
6. Organizer, 2019 Optimization Workshop, Department of Mathematics, National Taiwan Normal University, March 8, 2019.
7. Organizer, Mini Workshop on Nonlinear Analysis, Department of Mathematics, National Taiwan Normal University, January 9, 2019.
8. Organizer, 2017 Optimization Workshop, Department of Mathematics, National Taiwan Normal University, November 1, 2017.
9. Co-organizer, 2016 Optimization Workshop, Department of Mathematics, National Taiwan Normal University, July 26, 2016.
10. Organizer, One Day Workshop on Optimization, Department of Mathematics, National Taiwan Normal University, October 14, 2015.
11. Organizer, One Day Workshop on Nonlinear Analysis, Combinatorial Analysis, and Matrix Analysis, Department of Mathematics, National Taiwan Normal University, January 14, 2015.
12. Co-organizer, ICM Satellite Conference 2014: The Fourth Asian Conference on Nonlinear Analysis and Optimization, National Taiwan Normal University, Taipei, Taiwan, August 5-9, 2014.
13. Organizer, 2014 Taiwan-Germany Bilateral Workshop on Mathematics Education, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 26, 2014.
14. Organizer, The 1st Cross-straits Optimization Workshop, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 27-29, 2013.
15. Co-organizer, 2012 Workshop on Nonlinear Analysis and Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 28-30, 2012.
16. Co-organizer, 2011 Workshop on Nonlinear Analysis and Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 16-18, 2011.
17. Organizer, 2011 Optimization Workshop, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, May 20, 2011.
18. Co-organizer, 2010 Workshop on Nonlinear Analysis and Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 24-26, 2010.
19. Organizer, 2010 Optimization Meeting, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, April 22, 2010.

20. Co-organizer, 2009 Workshop on Nonlinear Analysis and Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 25-27, 2009.
21. Organizer, 2009 Mini Workshop on Optimization (2), Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, June 15, 2009.
22. Organizer, 2009 Mini Workshop on Optimization (1), Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, February 6, 2009.
23. Co-organizer, 2008 Workshop on Nonlinear Analysis and Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, December 17-19, 2008.
24. Organizer, Optimization Meeting, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 12, 2008.
25. Organizer, Mini Workshop on Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, October 18, 2007.
26. Coordinator of local organizing committee, 2006 Annual Meeting of Taiwanese Mathematics Society, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, December 8-10, 2006.
27. Organizer, 2006 Workshop on Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, December 8-10, 2006.
28. Co-organizer, Optimization Day, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, March 2, 2006.
29. Co-organizer, 2005 Workshop on Optimization, Department of Mathematics, National Taiwan Normal University, Taipei, Taiwan, November 29-30, 2005.

Editorial Board

1. Communications in Optimization Theory (Editor), since 09/2016.
2. Journal of Nonlinear and Convex Analysis (Guest Editor for a special issue), 09/2014 - 12/2015.
3. Linear and Nonlinear Analysis (Editor), since 01/2015.
4. Mathematical Problems in Engineering (Guest Editor for a special issue), 06/2013 - 04/2014.
5. Pacific Journal of Optimization (Associate Editor), since 12/2020.
6. Pacific Journal of Optimization (Guest Editor for a special issue), 09/2014 - 12/2015.
7. Taiwanese Journal of Mathematics (Associate Editor), 08/2017 - 07/2026.

Referee Services

1. Abstract and Applied Analysis.
2. Acta Mathematica Scientia.
3. Advances in Applied Mathematics and Mechanics.
4. Afrika Matematika.
5. Annals of Operations Research.
6. Applied Mathematical Modeling.
7. Applied Mathematics.
8. Applied Mathematics- A Journal of Chinese Universities.
9. Applied Mathematics and Computation.
10. Applied Mathematics and Optimization.
11. Applied Mathematics Letters.
12. Applied Numerical Mathematics.
13. Asian-European Journal of Mathematics.
14. Asia-Pacific Journal of Operational Research.
15. Calcolo.
16. Communications in Mathematical Research.
17. Communications in Nonlinear Science and Numerical Simulation.
18. Complexity.
19. Computational and Applied Mathematics.
20. Computational Optimization and Applications.
21. Computer-Aided Design and Applications.
22. Computers and Operations Research.
23. Computing.
24. Discrete Dynamics in Nature and Society.
25. Electronic Journal of Linear Algebra.
26. Engineering Optimization.
27. European Journal of Operational Research.
28. IEEE Transactions on Neural Networks.
29. IEEE Transactions on Systems, Man and Cybernetics: Systems.

30. IMA Journal of Numerical Analysis.
31. Frontiers of Mathematics in China.
32. Information Sciences.
33. Intelligent Data Analysis.
34. International Journal of Computer Mathematics.
35. International Journal of Information and Management Sciences.
36. International Journal of Numerical Analysis and Modeling.
37. International Journal of Operations Research.
38. Journal of Applied Analysis and Computation.
39. Journal of Applied Mathematics.
40. Journal of Applied Mathematics and Computing.
41. Journal of Computational and Applied Mathematics.
42. Journal of Computational Mathematics.
43. Journal of Computer and System Sciences.
44. Journal of Function Spaces.
45. Journal of Global Optimization.
46. Journal of Harbin Institute of Technology.
47. Journal of Industrial and Management Optimization.
48. Journal of Inequalities and Applications.
49. Journal of Intelligent Systems.
50. Journal of Mathematical Analysis and Applications.
51. Journal of Mathematical Research with Applications.
52. Journal of Nonlinear and Convex Analysis.
53. Journal of Scientific Computing.
54. Journal of Sensors.
55. Journal of Systems Science and Complexity.
56. Linear Algebra and its Applications.
57. Linear and Multilinear Algebra.
58. Mathematical Problems in Engineering.

59. Mathematical Programming.
60. Mathematical Modelling and Analysis.
61. Mathematics Methods of Operations Research.
62. Neural Computing and Applications.
63. Neural Networks.
64. Neural Processing Letters.
65. Neurocomputing.
66. Nonlinear Analysis: Theory, Methods and Applications.
67. Numerical Algebra, Control and Optimization.
68. Numerical Algorithms.
69. Nonlinear Functional Analysis and Applications.
70. Numerical Functional Analysis and Optimization.
71. Numerical Linear Algebra with Applications.
72. Numerical Mathematics: Theory, Methods and Applications.
73. Operations Research Letters.
74. Operators and Matrices.
75. Optimization.
76. Optimization Letters.
77. Optimization Methods and Software.
78. Pacific Journal of Optimization.
79. RAIRO-Operations Research.
80. Sao Paulo Journal of Mathematical Sciences.
81. ScienceAsia.
82. Set-Valued and Variational Analysis.
83. SIAM Journal on Matrix Analysis and Applications.
84. SIAM Journal on Optimization.
85. Taiwanese Journal of Mathematics.
86. Vietnam Journal of Mathematics.

Students Supervised

- 19 Master students.
- 6 Ph.D. students.
- 12 postdocs.