Curriculum Vitae

Jen-Chih Yao

Date of Birth: February 10, 1959
Place of birth: Chia-I, Taiwan
Status: Married
Number of Children: 1

Degree: Ph.D., Department of Operations Research, Stanford University, September, 1988–June, 1990
Master, Graduate School of Mathematics, National Taiwan Normal University University, September, 1981–June, 1983
Bachelor, National Taiwan Normal University, September, 1986– June, 1981

Mailing addresses:
Research Center for Interneural Computing
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Employments:
Director, Center for Interneural Computing, China Medical University Hospital, China Medical University, January 1, 2015–present
Chair Professor, Center for General Education, China Medical University, February 1, 2015–present
Chair Professor, Center for Fundamental Science, Kaohsiung Medical University, January 1, 2014–January 31, 2015
Consultant Members in Mathematics Division, Ministry of Science and Technology, January 1, 2015-December 31, 2016
Visiting Chair Professor, Tianjin Polytechnic University, Tianjin, September 2013–August 2017
Panel member in Mathematics Division, National Science Council, January 1, 2011 -December 31, 2013

Professor, Center for Fundamental Science, Kaohsiung Medical University, February 1, 2011–December 31, 2013
Professor, Department of Applied Mathematics, February 1993- January 31, 2011
Dean of College of Science, National Sun Yat-sen University, August 2004-January 2008
Chairman of the Department of Applied Mathematics, National Sun Yat-sen University, August 1, 1997-July 31, 2000.
Panel member in Mathematics Division, National Science Council, January 1, 1998 -December 31, 2000
Associate Professor, Department of Applied Mathematics, August 1991-February 1993
Associate Professor, Department of Industrial Engineering, Yuan Ze University, August 1990-July 1991.

Honors and Awards:
1990-1999: Research Awards (Class A) from Taiwan National Science Council
1992: Young Faculty Research Award of Sciences, National Sun Yat-sen University
1993: Outstanding Award of Research, National Sun Yat-sen University
2003: Excellence Award of Research, National Sun Yat-sen University
2010: Rising Star (September 2010 in Mathematics), ESI (Essential Science Indicators) from Thomson Reuters
2011: Outstanding Contribution Award, The Mathematical Society of the Republic of China
2013: Highly Cited Researcher (Preliminary List), Thomson Reuters (http://www.highlycited.com)
2014: Highly Cited Researcher, Thomson Reuters (http://www.highlycited.com)
2015: Professor Honoris Causa of the Babes-Bolyai University Cluj-Napoca
2015: Highly Cited Researcher, Thomson Reuters (http://www.highlycited.com)
2016: Highly Cited Researcher, Thomson Reuters (http://www.highlycited.com)
2017: Highly Cited Researcher, Thomson Reuters (http://www.highlycited.com)
2018: Highly Cited Researcher, Clarivate Highly Cited Researchers (https://hcr.clarivate.com)
2019: Highly Cited Researcher, Clarivate Highly Cited Researchers (https://hcr.clarivate.com)
2020: Highly Cited Researcher, Clarivate Highly Cited Researchers (https://hcr.clarivate.com)
2021: Highly Cited Researcher, Clarivate Highly Cited Researchers (https://hcr.clarivate.com)
2023: Foreign member, Academy of Romanian Scientists, elected on May 19, 2023
2023: Professor Honoris Causa, Babęs-Bolyai University of Cluj-Napoca, Romnia, December 2023

Grants selected from 2010:
On proximal gradient method for convex multiobjective optimization problems, MOST 113-2115-M-039 -001, 2024/08/01-2025/07/31, 664,000NTD

On solution methods for variational inclusions and related problems in semi-inner product spaces, MOST 111-2115-M-039-001-MY2, 2022/08/01-2024/07/31, 977,000NTD
On Algorithms for Vector Optimization Problems, NSTC 108-2115-M-039 -005 -MY3, 2019/08/01-2022/10/31, 4,137,000NTD
On solution methods for equilibrium and optimization problems on manifolds, MOST 105-2115-M-039-002-MY3, 2016/08/01-2019/09/30, 2,396,000NTD
On optimality conditions for optimal control problems, MOST 105-2221-E-039 -009 -MY3, 2016/08/01- 2019/09/30, 1,914,000NTD
Proximal methods and subdifferentials of functions on manifolds , MOST 102-2115-M-039 -003 -MY3, 2013/08/01-2016/09/30, 3,425,000NTD
On conical programming and its stability, MOST 102-2221-E-039 -017 -MY3 , 2013/08/01-02016/09/30, 2,440,000 NTD
On Stability in Semi-infinite Optimization, NSC 99 -2221-E-037 -007 -MY3 , 2010/08/01-2013/07/31, 1,912,000NTD
Variational Inequalities and Optimization on Riemannian Manifolds, NSC 99 -2115-M-037 -002 -MY3, 2010/08/01-2013/09/30, 3,660,000NTD

Bilateral projects (NSC-FRBR):
Methods of nonlinear analysis in solving of problems of control and optimization, MOST 103-2923-E-039-001-MY3, 2014/01/01-2016/12/31, 1,800,000NTD
Topological and variational methods in optimization problems , NSC 98 -2923-E-037 -001 -MY3, 2009/08/01-2012/07/31, 2,225,000NTD

Editorial Boards:
Taiwanese Journal of Mathematics, Editor-in-Chief, January 2007-December 31, 2010
Annals of Mathematical Sciences and Applications (Co-Editor-in-Chief)
Applied Analysis and Optimization (Co-Editor-in-Chief Editor)
Journal of Nonlinear and Variational Analysis (Co-Editor-in-Chief)
Journal of Applied and Numerical Optimization (Co-Editor-in-Chief)
Applied Set-valued Analysis and Optimization (Co-Editor-in-Chief)
Journal of Decision Making and Healthcare (Co-Editor-in-Chief)
Applicable Nonlinear Analysis (Co-Editor-in-Chief)
Optimization Eruditorum (Co-Editor-in-Chief)
Journal of Optimization Theory and Applications
Journal of Nonlinear and Convex Analysis
Fixed Point Theory
Applicable Analysis
Journal of Inequalities and Applications

Advances in Decision Sciences
International Journal of Differential Equations
Journal of Advanced Mathematical Studies
Cogent Mathematics
Set-Value Mathematics and Applications
Communications in Numerical Analysis
Journal of Global Optimization (Guest Editor)
Optimization (Guest Editor)
Fixed Point Theory and Applications (Guest Editor)

Area of Research Interest:
Vector optimization
Fixed point theory
Variational inequalities
Complementarity problems
Variational analysis
Equilibrium problems
Optimal control
Generalized convexity and generalized monotonicity

Referees:
SIAM Journal on Optimization, SIAM Journal on Matrix Analysis and Applications, Mathematics of Operations Research, Optimization, Journal of Optimization Theory and Applications, Journal of Mathematical Analysis and Applications, Journal of Global Optimization, Nonlinear Analysis, Computers and Mathematics with Applications, Mathematical Methods of Operations Research, Applied Mathematics Letters, Taiwanese Journal of Mathematics, Journal of Industrial Management and Optimization, Fixed Point Theory, Journal of Inequalities and Applications, Fixed Point Theory and Applications, Mathematical Review, Communication on Pure and Applied Analysis, European Journal of Operational Research, Central European Journal of Mathematics, Pacific Journal of Optimization, Journal of Nonlinear and Convex Analysis, Bulletin of the Australian Mathematical Society, Mathematical and Computer Modelling, Optimization Methods and Software, Journal of Computational and Applied Mathematics, Computation and Applied Mathematics, Journal of the Korean Mathematical Society, Applied Mathematics and Mechanics, Acta Mathematica Sinica, English Series, Numerical Functional Analysis and Optimization, Applicable Analysis, Advances in Nonlinear Variational Inequalities, Mathematical Modelling and Analysis, Bulletin of the Korean Mathematical Society, International journal of Optimization: Theory, Methods and Applications, Carpathian Journal of Mathematics, Journal of Systems Science and Complexity, Acta Mathematica Scientia

Books

1. Regina S. Burachik and Jen-Chih Yao, Variational Analysis and Generalized Differentiation in Optimization and Control In Honor of Boris S. Mordukhovich, Springer Optimization and Its Applications, Vol. 47, 231 pp. Hardcover, ISBN 978-1-4419-0436-2, 2010.
2. Qamrul Hasan Ansari and Jen-Chih Yao, Recent Developments in Vector Optimization, Vector Optimization Series, Vol. 1, 551 pp. Hardcover, ISBN 978-3-642-21113-3, 2011.
3. Qamrul Hasan Ansari, Elisabeth Köbis and Jen-Chih Yao, Vector Variational Inequalities and Vector Optimization, Springer, Theory and Applications, Vector Optimization Series, 509 pp. Hardcover, ISBN 978-3-319-63049-6, 2017.

Selected Publication from 2014: (905 papers have been published with citation 11,987 in Mathscinet; Google Scholar citation 25,082, H-Index 78 up to April 2025.)

1. Wei, Zhou; Yao, Jen-Chih; Zheng, Xi Yin, Strong Abadie CQ, ACQ, calmness and linear regularity. Math. Program. 145 (2014), no. 1-2, Ser. A, 97131.
2. Song, Wen; Xu, Xiaomei; Yao, Jen-Chih, A note on the condition numbers of convex sets. Math. Program. 149 (2015), no. 1-2, Ser. A, 459463.
3. Wang, Xiangmei; Li, Chong; Wang, Jinhua; Yao, Jen-Chih, Linear convergence of subgradient algorithm for convex feasibility on Riemannian manifolds. SIAM J. Optim. 25 (2015), no. 4, 23342358.
4. Huong, N. T. T.; Yao, J.-C.; Yen, N. D., Polynomial vector variational inequalities under polynomial constraints and applications. SIAM J. Optim. 26 (2016), no. 2, 10601071.
5. Wang, Jinhua; Li, Chong; Lopez, Genaro; Yao, Jen-Chih, Proximal point algorithms on Hadamard manifolds: linear convergence and finite termination. SIAM J. Optim. 26 (2016), no. 4, 26962729.
6. Shen, Weiping; Li, Chong; Yao, Jen-Chih, Convergence analysis of Newton-like methods for inverse eigenvalue problems with multiple eigenvalues. SIAM J. Numer. Anal. 54 (2016), no. 5, 29382950.
7. Yao, Jen-Chih; Zheng, Xi Yin; Zhu, Jiangxing, Stable minimizers of -regular functions. SIAM J. Optim. 27 (2017), no. 2, 11501170.

8. Li, Chong; Meng, Li; Peng, Lihui; Hu, Yaohua; Yao, Jen-Chih, Weak sharp minima for convex infinite optimization problems in normed linear spaces. SIAM J. Optim. 28 (2018), no. 3, 19992021.

9. Kien, Bui Trong; Tuyen, Nguyen Van; Yao, Jen-Chih, Second-order KKT optimality conditions for multiobjective optimal control problems. SIAM J. Control Optim. 56 (2018), no. 6, 40694097.

10. Shen, Zongshan; Yao, Jen-Chih; Zheng, Xi Yin, Calmness and the Abadie CQ for multifunctions and linear regularity for a collection of closed sets. SIAM J. Optim. 29 (2019), no. 3, 22912319.

11. Kornev, Sergey; Obukhovskii, Valeri; Yao, Jen-Chih, Random integral guiding functions in the periodic problem for random differential inclusions with causal multioperators. J. Differential Equations 268 (2020), no. 10, 57925810.

12. Kien, Bui Trong; Qin, Xiaolong; Wen, Ching-Feng; Yao, Jen-Chih, Second-order optimality conditions for multiobjective optimal control problems with mixed pointwise constraints and free right end point. SIAM J. Control Optim. 58 (2020), no. 4, 26582677.

13. Wang, Jinhua; Wang, Xiangmei; Li, Chong; Yao, Jen-Chih, Convergence analysis of gradient algorithms on Riemannian manifolds without curvature constraints and application to Riemannian mass. SIAM J. Optim. 31 (2021), no. 1, 172199.

14. Li, Chong; Ng, Kung Fu; Yao, Jen-Chih; Zhao, Xiaopeng, The FM and BCQ qualifications for inequality systems of convex functions in normed linear spaces. SIAM J. Optim. 31 (2021), no. 2, 14101432.

15. Jing, Zhao; Liu, Zhenhai; Vilches, Emilio; Wen, Chingfeng; Yao, Jen-Chih, Optimal control of an evolution hemivariational inequality involving history-dependent operators. Commun. Nonlinear Sci. Numer. Simul. 103 (2021), Paper No. 105992, 17 pp.

16. Zhao, Xiaopeng; Yao, Jen-Chih, Linear convergence of a nonmonotone projected gradient method for multiobjective optimization. J. Global Optim. 82 (2022), no. 3, 577594.

17. Jolaoso, Lateef O.; Shehu, Yekini; Yao, Jen-Chih, Inertial extragradient type method for mixed variational inequalities without monotonicity. Math. Comput. Simulation 192 (2022), 353369.

18. Ogbuisi, Ferdinard U.; Shehu, Yekini; Yao, Jen-Chih, An alternated inertial method for pseudomonotone variational inequalities in Hilbert spaces. Optim. Eng. 23 (2022), no. 2, 917945.

19. Liu, Liya; Petruşel, Adrian; Qin, Xiaolong; Yao, Jen-Chih, An inertial subgradient-extragradient algorithm for solving pseudomonotone variational inequalities. Fixed Point Theory 23 (2022), no. 2, 533555.

20. Kum, Sangho; Li, Chong; Wang, Jinhua; Yao, Jen-Chih; Zhu, Linglingzhi, Riemannian linearized proximal algorithms for nonnegative inverse eigenvalue problem, Numer. Algorithms 94 (2023), no. 4, 18191848.

21. Ansari, Qamrul Hasan; Uddin, Moin; Yao, Jen-Chih, Convergence of the Gauss-Newton method for convex composite optimization problems under majorant condition on Riemannian manifolds, J. Complexity 80 (2024), Paper No. 101788, 24 pp.

22. Qin, Xiaolong; Duc Thinh, Vo; Yao, Jen-Chih, On new generalized differentials with respect to a set and their applications, Set-Valued Var. Anal. 32 (2024), no. 3, Paper No. 27, 27 pp.

23. L. Liu, X. Qin and J. C. Yao, A distributed stochastic forward-backward-forward self-adaptive algorithm for Cartesian stochastic variational inequalities, Applied Numerical Mathematics, 211 (2025), 17-41.

24. H. ur Rehman, B. Tan and J. C. Yao, Relaxed inertial subgradient extragradient methods for equilibrium problems in Hilbert spaces and their applications to image restoration, Communications in Nonlinear Science and Numerical Simulation, (2025) 108795.