Altannar Chinchuluun, Ph.D.

CURRICULUM VITAE

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Education

- Ph.D. in Operations Research/Operations Management, Department of Industrial and Systems Engineering, University of Florida, August 2007 Advisor: Dr. Panos M. Pardalos.
- M.Sc. in Operations Research/Operations Management, Department of Industrial and Systems Engineering, University of Florida, January 2005
- B.Sc. in Financial Management, Computer Science and Management School, Mongolian University of Science and Technology, Mongolia, December 2002
- B.Sc. in Mathematics, School of Mathematics and Computer Science, National University of Mongolia, Mongolia, June 2002

Work Experience

- Lecturer/Associate Professor, Business School, National University of Mongolia, since 2011
- Lead Researcher, Institute of Mathematics and Informatics, Mongolian Academy of Sciences, Mongolia, 2011 - 2017, since 2020
- Managing Director, German-Mongolian Institute for Resources and Technology, Mongolia, 2014 2015
- Research Associate, Centre for Process Systems Engineering, Imperial College London, UK, 2009 2011.
- Adjunct Assistant Professor, Department of Industrial and Systems Engineering, University of Florida, USA, 2007 - 2009.
- Research Assistant/Teaching Assistant, Department of Industrial and Systems Engineering, University of Florida, USA, 2003 2007.
- Summer Internship, Graduate Engineering & Research Center (GERC) Eglin Air Force Base, USA, May 2004 - August 2004.

Professional Activities

- Associate Editor, Journal of Global Optimization, Springer
- Associate Editor, Computational Management Science, Springer
- Associate Editor, SN Operations Research Forum, Springer
- ◊ Invited Talks and Seminars:

Isenberg School of Management at the University of Massachusetts Amherst (USA), University of Buffalo SUNY (USA), San José State University (USA), Northern Michigan University (USA), University of Edinburgh (UK), Imperial College London (UK), Warwick Business School (UK), Aarhus School of Business (Denmark), Inje University (South Korea), Tsinghua University (China), Seoul National University (South Korea), International Conferences

Honors and Awards

- The World Academy of Sciences (TWAS) Prize for Young Scientist in Mathematics, 2018
- Mongolian State Prize Laureate in Mathematics, Mongolia, 2012
- Leading Scientist, Mongolian Academy of Sciences, Mongolia, 2012
- Third Place, Mongolian Best Scientific Work of the Year 2010 (Optimization and Optimal Control) Mongolian Ministry of Education Culture and Science, Mongolia, 2010
- Outstanding International Student Award, College of Engineering, University of Florida, 2006 and 2007.
- Graduate Student Award for Excellence in Research, Department of Industrial and Systems Engineering, University of Florida, 2006 and 2007.
- Superlative Teaching Assistant Award, Department of Industrial and Systems Engineering, University of Florida, 2007.
- INFORMS 2006 Doctoral Colloquium participant, Department of Industrial and Systems Engineering, University of Florida, 2006.
- Graduate Research/Teaching Assistantships, Department of Industrial and Systems Engineering, University of Florida, 2003–2007.
- Second Place, "Eureka" Students National Conference, Mongolia, 2002.
- First Place, Students Research Competition, Computer Science and Management School, Mongolian University of Science and Technology, 2002.
- The Best Student of the Year : NEW WORLD 2001, Mongolian Ministry of Education and Young Leader Club, Mongolia, 2001.
- Honorable Mention, Students Research Competition, National University of Mongolia, 2001.
- Outstanding Undergraduate Student Award, University Research Affairs, National University of Mongolia, 2001.
- ◊ First Place, Students Research Competition, National University of Mongolia, 1999.
- National Undergraduate Scholarship of Mongolia, National University of Mongolia, 1998–2002.

Publications

♦ Books:

- 1. Altannar Chinchuluun, A. Migdalas, P.M. Pardalos, and L. Pitsoulis, editors. *Pareto Optimality, Game Theory and Equilibria*, Springer (2008)
- 2. Altannar Chinchuluun, P.M. Pardalos, R. Enkhbat, and I. Tseveendorj, editors. *Optimization and Optimal Control: Theory and Applications*, Springer (2010)
- 3. Altannar Chinchuluun, P.M. Pardalos, R. Enkhbat and E.R. Pistikopoulos, editors, *Optimization*, Simulation and Control: Theory and Applications, Springer (2012)
- ◊ Journal Special Issues:
 - Altannar Chinchuluun, guest editor. *Journal of Global Optimization:* Special Issue on Complementarity, Duality and Global Optimization in Science and Engineering, Vol. 47, No. 3, Springer (2010)

- 2. Altannar Chinchuluun, R. Enkhbat, and I. Tseveendorj, guest-editors. *Optimization:* Special Issue on Optimization and Optimal Control, Vol 58, No. 7, Taylor & Francis (2009)
- 3. R. Enkhbat and Altannar Chinchuluun, guest-editors. *Journal of Global Optimization:* Special Issue on Optimization, Simulation and Control, Vol 65, No 1, Springer (2013)
- 4. K.L.Teo, Altannar Chinchuluun, and C.K-F. Yiu, guest-editors, *Applied Mathematical Modelling:* Special Issue on Modelling and Optimization in Engineering Applications, Elsevier (2018)

- 1. P. Yan, J. Pei, and Altannar Chinchuluun. Strategic Decisions of Sales and Pay-per-Use Rentals Under Incomplete Product Availability, *Journal of Global Optimization*, 76, 1-21 (2020)
- E.N. Pistikopoulos, L. Dominguez, C. Panos, K. Kouramas, Altannar Chinchuluun. Theoretical & Algorithmic Advances in Multi-Parametric Programming & Control. *Computational Management Science*, 9(2), 183-203 (2012)
- 3. P. Georgiev, Altannar Chinchuluun, and P.M. Pardalos, Optimality Conditions of First Order for Global Minima of Locally Lipschitz Functions, *Optimization*, 60(1&2), 277-282 (2011)
- M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. Decision Rules for Efficient Classification of Biological Data. Optimization Letters, 3:357–366 (2009)
- P. Georgiev, P.M. Pardalos, and Altannar Chinchuluun. Localization of Minimax Points. *Journal* of GlobalOptimization, 40:489–494 (2008)
- A. Chinchuluun, D.H. Yuan, and P.M. Pardalos. Optimality Conditions and Duality for Nondifferentiable Multiobjective Fractional Programming with Generalized Convexity. *Annals of Operations Research*, 154:133–147 (2007)
- A. Chinchuluun, and P.M. Pardalos. A Survey of Recent Developments in Multiobjective Optimization. Annals of Operations Research, 154:29–50 (2007)
- 8. P. Georgiev, P.M. Pardalos, and A. Chinchuluun. Localization of Minimax Points. *Journal of Global Optimization*, 40:489–494 (2008)
- D.H. Yuan, A. Chinchuluun, X.L. Liu, and P.M. Pardalos. Generalized Convexities and Generalized Gradients Based on Algebraic Operations. *Journal of Mathematical Analysis and Applications*, 321:675–690 (2006)
- 10. A. Chinchuluun, E. Rentsen, and P.M. Pardalos. A Note on the Maximization of Strongly Convex Functions. *International Journal of Pure and Applied Mathematics*, 20:529–538 (2005)
- D.H. Yuan, X.L. Liu, A. Chinchuluun, and P.M. Pardalos. Nondifferentiable Minimax Fractional Programming Problems with (C, α, ρ, d)-Convexity. *Journal of Optimization Theory and Applications*, 129:185–199 (2006)
- 12. P.M. Pardalos, and A. Chinchuluun. Some Recent Developments in Deterministic Global Optimization. *Operations Research: An International Journal*, 4:3–28 (2005)
- 13. A. Lkhamsuren, A. Chinchuluun, and E. Rentsen. A Note on the Connection of Variational Inequalities with Convex and Concave Programming. *Mongolian Mathematical Journal*, 9:2–8 (2005)
- 14. A. Chinchuluun, P.M. Pardalos, and E. Rentsen. Global Minimization Algorithms for Concave Quadratic Programming Problems. *Optimization*, 54:627–639 (2005)
- 15. A. Chinchuluun, B. Barsbold, and E. Rentsen. A Global Method for Solving Convex Quadratic Maximization Problem. *Mongolian Mathematical Journal*, 7:19–27 (2004)

 N. Fan, Altannar Chinchuluun, and P.M. Pardalos. Integer Programming of Biclustering Based on Graph Models. In: Chinchuluun, A., Pardalos, P.M., Enkhbat, R., and Tseveendorj, I., editors, *Optimization and Optimal Control: Theory and Applications*, Springer, pages 479–498 (2010)

- P.M. Pardalos, V.A. Yatsenko, A. Messo, Altannar Chinchuluun, and P. Xanthopoulos. An OptimizationApproach for finding a Spectrum of Lyapunov Exponents, In: Chaovalitwongse, W., Pardalos, P.M., and Xanthopoulos, P., editors, *Computational Neuroscience*, Proceedings of the Conference on Computational Neuroscience, Gainesville, Florida, USA, 2008, Springer, pages 285–304 (2010)
- 3. Altannar Chinchuluun, P. Xanthopoulos, V. Tomaino, and P.M. Pardalos. Data Mining Techniques in Agricultural and Environmental Sciences. In: Papajorgji, P. and Pinet, F., editors, *New Technologies for Constructing Complex Agricultural and Environmental Systems*, IGI Global, pages 311-325 (2010)
- M.R. Guarracino, A. Nebbia, V. Manna, Altannar Chinchuluun, and P.M Pardalos. Protein-ProteinInteractions Prediction using Nearest Neighbor Classification Algorithm and Feature Selection. In: BIOMAT 2009: Proceedings of 8th International Symposium on Mathematical and Computational Biology, Brasilia, Brazil, August 1 - August 6, 2009, (2010)
- M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. A Supervised Learning Technique and Its Applications to Computational Biology. In: *CIBB 2008: Proceedings of Computational Intelligence Methods for Bioinformatics and Biostatistics Conference*, Salerno, Italy, October 3 - October 4, 2008, Lecture Notes in Bioinformatics 5488, pages 275–283 (2009)
- G. Felici, P. Bertolazzi, M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. Logic Formulas Based Knowledge Discovery and Its Application to the Classification of Biological Data. In: R.P.Mondaini, editor, *BIOMAT 2008: Proceedings of 8th International Symposium on Mathematical and Computational Biology*, Campos do Jord[~]ao - SP, Brazil, World Scientific, pages 223–234 (2009)
- D. Abbate, M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. Neural Network Classificationwith Prior Knowledge for the Analysis of Biological Data, In: Mondaini, R.P., editor, BIOMAT2008: Proceedings of 8th International Symposium on Mathematical and Computational Biology, Camposdo Jord^{*}ao SP, Brazil, World Scientific, pages 265–279 (2009)
- Altannar Chinchuluun, P.M. Pardalos, and H.X. Huang. Multilevel Optimization: Complexity Issues,Optimality Conditions, Algorithms. In: Gao, D.Y. and Sherali, H.D., editors, *Proceedings* of International Conference on Complementarity, Duality, and Global Optimization in Science and Engineering, Blacksburg, Virginia, USA, 2005, Advances in Mechanics and Mathematics, Vol. 3, Springer, pages 197–221 (2008)
- Altannar Chinchuluun, A. Karakitsiou, and A. Mavrommati, Game Theory Models and their Applicationsin Inventory Management and Supply Chain. In: Chinchuluun, A., Migdalas, A., Pardalos, P.M., and Pitsoulis, L., editors, *Pareto Optimality, Game Theory and Equilibria*, Springer, pages 833–865 (2008)
- E. Rentsen, J, Guddat, and Altannar Chinchuluun, Parametric Multiobjective Optimization. In: Chinchuluun, A., Migdalas, A., Pardalos, P.M., and Pitsoulis, L., editors, *Pareto Optimality, Game Theoryand Equilibria*, Springer, pages 529–538 (2008)
- P.M. Pardalos, V. Yatsenko, A. Chinchuluun, and A. Nahapetyan, Differentiable Games of Multiple Agents and Geometric Structures. In: Chinchuluun, A., Migdalas, A., Pardalos, P.M., and Pitsoulis, L., editors, *Pareto Optimality, Game Theory and Equilibria*, Springer, pages 267-306 (2008)
- D.H. Yuan, Altannar Chinchuluun, X.L. Liu, and P.M. Pardalos. Optimality Conditions and Duality forMultiobjective Programming Involving (C; alpha; rho; d)-Type I Functions. *Proceedings of* 8th International Symposium Generalized Convexity and Generalized Monotonicity, Varese, Italy, 2005, LectureNotes in Economics and Mathematical Systems, Springer, Vol. 583, pages 73–87 (2006)
- A. Chinchuluun, and P.M. Pardalos. Multiobjective Programming Problems under Generalized Convexity, In: Torn, A., Zilinskas, J., editors, *Models and Algorithms for Global Optimization*, Springer Optimization and Its Applications, Vol. 4, pages 3–20 (2006)
- 14. M. Min, and A. Chinchuluun. Optimization in Wireless Networks. In: P.M. Pardalos and Resende, M., editors, *Handbook of Optimization in Telecommunications*, Springer, pages 891–915 (2006)

 Altannar Chinchuluun, P.M. Pardalos, and E. Rentsen. A Numerical Method for Concave Programming Problems. In: Jeyakumar, V. and Rubinov, A., editors, *Continuous Optimization: Current Trends and Modern Applications*, Proceedings of the Australian Mathematical Sciences Institute Workshop on Continuous Optimization and Optimal Control with Applications, Victoria, Australia, 2003, Applied Optimization, Springer, Vol. 99, pages 251–272 (2005)

♦ Abstracts in Conferences:

- P. Yan, J. Pei, and Altannar Chinchuluun. Strategic Decisions of Sales and Pay-per-Use Rentals Under Incomplete Product Availability, In *The 6th International Conference on Optimization, Simulation and Control (COSC2019)*, June 21-23, 2019
- Altannar Chinchuluun. A Heuristic Algorithm for the Mixed-Integer Setup Knapsack Problem, In 17th Baikal International Triennial School-Seminar: Methods of Optimization and Their Applications, Baikal, Russia, July 31-August 6, 2017
- Altannar Chinchuluun. A Connection Between Variational Inequalities and Concave Programming, In *The 4th International Conference on Optimization*, Simulation and Control, Ulaanbaatar, Mongolia, July 1-4, 2013
- A. Arulselvan, and Altannar Chinchuluun. Parametric Support Vector Machines, In International Conference on Biomedical Data & Knowledge Mining: Towards Biomarker Discovery, Chania, Greece, July 7 - 9, 2010
- Altannar Chinchuluun, and M.R. Guarracino. Prior Knowledge Can Enhance Classification Accuracy of Biomedical Data, In *INFORMS Annual Meeting*, San Diego CA, October 11 14, 2009
- Altannar Chinchuluun, and A. Arulselvan. On Two Multiobjective Combinatorial Optimization Problems, In *INFORMS Annual Meeting*, San Diego CA, October 11 14, 2009
- P. Georgiev, Altannar Chinchuluun, and P.M. Pardalos. Parametrized Nash Equilibrium Problemsand Applications to Electricity Markets, In *INFORMS Annual Meeting*, San Diego CA, October11 - 14, 2009
- Altannar Chinchuluun, A. Arulselvan, and P.M. Pardalos. A GRASP for a Biobjective Critical Node Detection Problem, *20th International Symposium on Mathematical Programming*, Chicago, USA, August 23 28, 2009
- P. Georgiev, Altannar Chinchuluun, and P.M. Pardalos. Parameterized Nash Equilibrium Problems and Applications, 51st Workshop on Variational Analysis and Applications, Erice, Italy, May 9 -17, 2009
- P. Georgiev, Altannar Chinchuluun, and P.M. Pardalos. Equilibrium Models in Power System Networks, *Power Systems Modelling 2009*, University of Florida, Gainesville, Florida, March 18 -20, 2009
- D. Abbate, M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. Neural Network Classification with Prior Knowledge for the Analysis of Biological Data, *BIOMAT 2008: The 8th International Symposium on Mathematical and Computational Biology*, Campos do Jord[~]ao SP, Brazil, November22 27, 2008
- Altannar Chinchuluun, M.R. Guarracino, and P.M. Pardalos. A Classification Technique in Computational Biology. In INFORMS Annual Meeting, Washington DC, October 12 - 15, 2008
- M.R. Guarracino, Altannar Chinchuluun, and P.M. Pardalos. A Supervised Learning Technique and Its Applications to Computational Biology. In *CIBB 2008: Fifth International Meeting on Computational Intelligence Methods for Bioinformatics and Biostatistics*, Salerno, Italy, October 3 4, 2008
- Altannar Chinchuluun, and P.M. Pardalos. A Unified String Kernel for Biological Sequences. In INFORMS Annual Meeting, Seattle, Washington, November 4 - 7, 2007
- Altannar Chinchuluun, and P.M. Pardalos. Recent Developments in Multiobjective Optimization. In *The Second International Conference on Optimization and Optimal Control*, Ulaanbaatar, Mongolia, July 17 - July 20, 2007.

- Altannar Chinchuluun, P.M. Pardalos, and D.H. Yuan. On the Performances of K-means Type Clustering Agorithms. In *INFORMS Annual Meeting*, Pittsburgh, Pennsylvania, November 5 -November 8, 2006.
- Altannar Chinchuluun, and P.M. Pardalos. A Method for Concave Programming Problems. In *INFORMS Annual Meeting*, San Francisco, California, November 13 November 16, 2005.
- Altannar Chinchuluun, and P.M. Pardalos. Optimality Conditions and Duality for Multiobjective Programming Problems with Generalized Convexity. In *International Conference on Complementarity, Duality, and Global Optimization in Science and Engineering,* Virginia Polytechnic Institute and State University, Blacksburg, Virginia, August 15 - August 17, 2005.
- Altannar Chinchuluun, and P.M. Pardalos. A Method for Concave Programming Problems. In *International Conference on Computational Management Science*, University of Florida, Gainesville, Florida, March 31 April 3, 2005.
- B. Barsbold, Altannar Chinchuluun, and E. Rentsen. A Global Method for Solving the Convex Quadratic Maximization Problem. In 13th Baikal International School "Optimization Methods and Their Applications", Irkutsk-Severobaikalsk, Russia, July 2 - July 8, 2005.

Additional Professional Activities :

- ◊ Session Chair, Forum: Development of Mongolia, London, May 2, 2010
- ◊ Session Chair, INFORMS Annual Meeting, San Diego CA, October 11 14, 2009
- Member of the organizing committee, "Power Systems Modelling 2009", University of Florida, Gainesville, Florida, March 18 - 20, 2009
- Session Chair, "International Conference on the Dynamics of Information Systems", University of Florida, Gainesville, Florida, January 28 - 30, 2009
- Co-organizer of "The Second International Conference on Optimization and Optimal Control", Ulaanbaatar, Mongolia, July 17 - 20, 2007.
- Member of the organizing committee, "Conference on Data Mining, Systems Analysis and Optimization in Biomedicine", University of Florida, Gainesville, FL, March 28 - 30, 2007.
- Co-organizer of "The Second International Conference on Complementarity, Duality, and Global Optimization in Science and Engineering", University of Florida, Gainesville, FL, February 28 - March 2, 2007.
- Member of the organizing committee, "International Conference on Computational Management Science", University of Florida, Gainesville, FL, March 31 - April 3, 2005.
- Member of the organizing committee, "International Conference on Optimization and Optimal Control", Ulaanbaatar, Mongolia, August 13 - 17, 2002.

Research Interests

Optimization, Multi-Criteria Decision Making, Machine Learning, Supply Chain Management, Game Theory, Computational Finance

References

 Dr. Panos M. Pardalos, Distinguished Professor 303 Weil Hall, Box 116595, Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL 32611, USA Phone: +1 (352) 392-9011 Fax: (352) 392-3537 Email: pardalos@ufl.edu

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