

Curriculum Vitae

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Education

1963–1969 Honors B.A. in Mathematics, 1969, University of Utah
Magna Cum Laude, Phi Beta Kappa, Phi Kappa Phi, Tau Beta Pi, Eta Kappa Nu
1969–1971 M.S. in Electrical Engineering, 1971, University of Utah
1976–1983 Ph.D. in Electrical Engineering, 1983, Stanford University

Academic Positions

2009– Dean of Graduate Studies, Brigham Young University
1995– Professor of Electrical Engineering, Brigham Young University
1984–1995 Associate Professor of Electrical Engineering, Brigham Young University
1991–1995 Adjunct Associate Professor, Utah State University

Industrial Experience

1972–1975 Rockwell International Corporation, Anaheim CA. Project Engineer, conducted post-flight accuracy analysis of Minuteman II weapons system.
1975–1984 ESL Inc., Sunnyvale, CA. Senior Engineer, conducted missile weapons performance analysis and assessments.

Publications

Books

- [1] W. C. Stirling. *Social Choice on Networks*. Cambridge Univ. Press, Cambridge, UK, 2016. in press.
- [2] W. C. Stirling. *Theory of Conditional Games*. Cambridge Univ. Press, Cambridge, UK, 2012.
- [3] W. C. Stirling. *Satisficing Games and Decision Making: with applications to engineering and computer science*. Cambridge Univ. Press, Cambridge, UK, 2003.
- [4] T. K. Moon and W. C. Stirling. *Mathematical Methods and Algorithms in Signal Processing*. Prentice-Hall, Upper Saddle River, NJ, 2000.

Book Chapters

- [1] W. C. Stirling. A conditional game-theoretic approach to cooperative multiagent systems design. In *Communications in Computer and Information Science*, pages 334–350. Springer, 2012.
- [2] W. C. Stirling, M. A. Goodrich, and D. J. Packard. Satisficing equilibria: A non-classical approach to games and decisions. In *Game Theory and Decision Theory in Agent-based Systems*. Kluwer Academic Publishers, 2002.
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- [4] D. R. Morrell and W. C. Stirling. Set-valued kalman filtering. In G. Chen, editor, *Approximate Kalman Filtering*, chapter IV, pages 137–160. World Scientific, Singapore, 1993.

Archival Journal Articles

- [1] W. C. Stirling and T. Felin. Satisficing, preferences, and social interaction: a new perspective. *Theory and Decision*, pages 1–30, 2015.
- [2] W. C. Stirling and T. Felin. Game theory, conditional preference, and social influence. *PLoS ONE* 8(2): e56751. doi:10.1371/journal.pone.0056751, 2013.
- [3] W. C. Stirling and M. S. Nokleby. Satisficing coordination and social welfare for robotic societies. *International Journal of Social Robotics*, 1:53–69, 2009.
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- [5] J. K. Archibald, W. C. Stirling, and M. S. Nokleby. Socially rational models for autonomous agents. *The Open Cybernetics and Systems Journal*, 2:122–141, 2008.
- [6] J. K. Archibald, J. Hill, N. Jepsen, W. Stirling, and R. Frost. A satisficing approach to aircraft conflict resolution. *IEEE Transactions on Systems, Man, and Cybernetics (Part C)*, pages 510–521, 2008.
- [7] J. K. Archibald, J. C. Hill, R. F. Johnson, and W. C. Stirling. Satisficing negotiations. *IEEE Transactions on Systems, Man, Cybernetics (Part C)*, pages 4 – 18, 2006.
- [8] W. C. Stirling. Social Utility Functions, Part 1 — Theory. *IEEE Transactions on Systems, Man, and Cybernetics (Part C)*, 35(4):522–532, 2005.
- [9] W. C. Stirling and R. L. Frost. Social Utility Functions, Part 2 — Applications. *IEEE Transactions on Systems, Man, and Cybernetics (Part C)*, 35(4):533–543, 2005.
- [10] W. C. Stirling. Games machines play. *Minds and Machines*, 12:327–352, 2002.
- [11] W. C. Stirling, M. A. Goodrich, and D. J. Packard. Satisficing equilibria: A non-classical approach to games and decisions. *Autonomous Agents and Multi-Agent Systems*, 5:305–328, 2002.
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- [14] W. C. Stirling and M. A. Goodrich. Satisficing games. *Information Sciences*, 114:255–280, March 1999.
- [15] M. A. Goodrich, W. C. Stirling, and R. L. Frost. Model predictive satisficing fuzzy logic control. *IEEE Trans. on Fuzzy Systems*, 7(3):319–332, 1999.
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- [18] W. C. Stirling, M. A. Goodrich, and R. L. Frost. Procedurally rational decision-making and control. *IEEE Control Systems Magazine*, 16(5):66–75, October 1996.
- [19] T. K. Moon, R. L. Frost, and W. C. Stirling. An epistemic utility approach to coordination in the prisoner’s dilemma. *BioSystems*, 37(1-2):167–176, 1996.
- [20] T. K. Moon, S. E. Budge, W. C. Stirling, and J. B. Thompson. Epistemic decision theory applied to multiple-target tracking. *IEEE Trans. Systems, Man, Cybernet.*, SMC-24(2):234–245, 1994.

- [21] W. C. Stirling. Coordinated intelligent control via epistemic utility theory. *IEEE Control Systems Magazine*, 13(5):21–29, October 1993.
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- [23] W. C. Stirling and D. R. Morrell. Convex bayes decision theory. *IEEE Trans. Systems, Man, Cybernet.*, 21(1):173–183, January/February 1991.
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- [26] W. C. Stirling and M. Morf. A new decision-directed algorithm for nonstationary priors. *IEEE Transactions on Automatic Control*, 29(10):928–930, October 1984.

Conference Proceedings

- [1] W. C. Stirling. Social choice on networks. In *Proceedings of 2015 International Conference on Systems, Man, and Cybernetics*, October 2015.
- [2] W. C. Stirling. On the intrinsic coordinatability of network control systems. In *Proceedings of IEEE International Conference on Intelligent Control*, October 2014.
- [3] W. C. Stirling. A game-theoretic social model for multiagent systems. In *Proceedings of 2013 IEEE International Conference on Systems, Man, and Cybernetics*, October 2013.
- [4] W. C. Stirling. Neo-satisficing control of cooperative systems. In *Proceedings of 2013 International Conference on Systems, Man, and Cybernetics*, October 2013.
- [5] W. C. Stirling. Intrinsic coordinatability of agent based systems. In *Proceedings of 11th WSEAS International Conference*, January 2012.
- [6] W. C. Stirling, C. G. Giraud-Carrier, and T. Felin. A framework for the design and synthesis of coordinated social systems. In *Proceedings of Fourth International Conference on Social Informatics (LNCS 7710)*, pages 351–364, 2012.
- [7] W. C. Stirling. Conditional game theory: A generalization of game theory for cooperative multiagent systems. In *Proceedings of the 3rd International Conference on Agents and Artificial Intelligence*, pages 64–73, 2011.
- [8] W. C. Stirling. Conditional games: A framework for coordination. In *Proceedings of the 2011 Chinese Control and Decision Conference*, pages 35–40, 2011.
- [9] W. C. Stirling and M. S. Nokleby. Rational coordination under risk: Coherence and the nash bargain. In *Proceedings of Fourth IEEE International Conference on Automation Science and Engineering*, pages 122–127, 2008.
- [10] W. C. Stirling and R. L. Frost. Reconciling group and individual preferences of multi-agent systems. In *Proceedings of the 2007 IEEE International Conference on Networks, Sensing, and Control*, pages 477–482, University of Brunel, London, UK, 15–17 August 2007.
- [11] M. S. Nokleby and W. C. Stirling. Attitude adaptation in satisficing games. In *Proceedings 2007 IEEE Symposium Series on Computational Intelligence*, pages 331–338, Honolulu, Hawaii, USA, 1–5 April 2007.
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- [15] W. C. Stirling, R. L. Frost, and H. L. Miller. The ultimatum game: A study in social systems control. In *Proceedings of the 2006 IEEE International Control Conference*, The University of Strathclyde and The University of Glasgow, Glasgow, UK, 30 August – 1 September 2006.
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- [52] W. C. Stirling, G. Ware, and J. Pike. Optimal mesospheric oh rotational temperature and intensity estimation from oh radiation. In *1988 Spring Meeting of the American Geophysical Union*, 1988.
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