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*EDUCATION*

**Ph.D.** in Systems and Information Engineering, University of Virginia,  
Charlottesville, May 2003.

**M.S.** in Environmental Science, University of Colorado, Denver, May 1996.

**B.A.** in Biology, University of Colorado, Denver, May 1991, with honors.

**B.A.** in Chemistry, University of California, Berkeley, May 1979.

*PROFESSIONAL EXPERIENCE*

President, Gamma Two, Inc., Denver, CO, 2003 – now.

Research Assistant, University of Virginia, Charlottesville, VA, 1997 – 2003.

Enforcement Specialist, United States Environmental Protection Agency, Denver,  
Colorado, 1989 – 1995.

Owner, Back Country Supply, Nederland, Colorado, 1982 – 1988

Chemist, Colorado State Health Department, Denver, Colorado, 1979 – 1981.

*DISSERTATION*

*Using Data-Mining and Multi-Agent Simulation to Predict Criminal Behavior,*  
University of Virginia, 2003.

*AWARDS*

New Investigator Award, 17<sup>th</sup> Annual Meeting of the Brunswik Society, 2001.

*ARCHIVAL JOURNAL PUBLICATIONS*

Brown, D. E. and L. F. Gunderson, “Using Clustering to Discover the Preferences of  
Computer Criminals,” *IEEE Transaction on Systems, Man, and Cybernetics – Part A: Systems  
and Humans*, Vol. 31, No 4, July 2001.

Brown, D. E., L. F. Gunderson, and M. H. Evans “Interactive Analysis of Computer Crimes,”  
*Computer*, Vol.33, No 8, August 2000.

## *BOOK CHAPTERS*

Brown, D. E. and L. F. Gunderson, "Using Data Mining to Discover the Preferences of Computer Criminals," *Advances in Computers: Volume 56*, 2002 Ed. M. Zelkowitz, Academic Press.

## *CONFERENCES AND PROCEEDINGS*

Gunderson, L. F. and Gunderson, J. P. , "Reliability Testing for Embodied Autonomous Systems" IROS 2007 Workshop on Performance Evaluation and Benchmarking for Intelligent Robots and Systems, San Diego, CA, Nov 02, 2007.

Gunderson J. P. and Gunderson, L. F., "Autonomy (What's it Good for?)", Performance Metrics for Intelligent Systems, Gaithersburg, MD, August 28 - 30, 2007.

Gunderson, J. P. and Gunderson, L. F., "Reification: What is it and Why Should I Care?", Performance Metrics for Intelligent Systems, Gaithersburg, MD, August 21 - 23, 2006.

Gunderson, L. F., Kilgore T., and Gunderson, J. P., "Living with a Personal Disk Jockey – the Start of the Journey", AAAI Spring Symposium, Palo Alto, CA, March, 2005.

Gunderson, L.F. and Gunderson, J. P., "Ground Truthing Models of Social Behavior: Two Real World Examples", North American Association for Computational Social and Organizational Science Conference, Pittsburgh, PA, June 27 – 29, 2004

Gunderson, L.F. and J. P. Gunderson, J.P. "Using Data-Mining to Allow Robots to Discover the Preferences of Humans," IEEE International Conference on Integration of Knowledge Intensive Multi-Agent Systems, KIMAS '03, Cambridge, MA, September 30 – October 4, 2003.

Gunderson, L.F., "Using Data Mining and Judgment Analysis to Construct a Predictive Model of Crime," IEEE International Conference on Systems, Man, and Cybernetics, Hamammet, Tunisia, October, 2002.

Gunderson, L. F. and D. E. Brown, "Using Cluster Specific Saliency Weighting to Determine the Preferences of Agents for Multi-Agent Simulations," IEEE International Conference on Systems, Man, and Cybernetics, Tucson, Arizona, October, 2001.

Gunderson, L. F. and D. E. Brown "Using Data-Mining to Predict the Targets of a Computer Based Attack," Applied Telecommunication Symposium, 2001 Advanced Simulation Technologies Conference, Seattle, Washington, April 22-26, 2001.

Gunderson, L. F. and D. E. Brown, "Using a Multi-Agent Model to Predict Both Physical and Cyber Criminal Activity," IEEE International Conference on Systems, Man, and Cybernetics, Nashville, Tennessee, October, 2000.

Gunderson, L.F. and R. Krzysztofowicz, "Interface for Displaying Probabilistic River Forecasts to Decision Makers," 14<sup>th</sup> Conference on Hydrology, Dallas, Texas, 10-15 January, 1999.

Gunderson, J. P. and L. F. Gunderson, "Coupling Geographic Information Systems and Computer Simulations to Model Spatially Non-homogeneous Domains," Conference Proceedings: Geographic Information Systems in Environmental Resources Management 1996.

#### *SYMPOSIA AND WORKSHOPS*

Gunderson, L.F., Sigman, J. and Weiss, S., "Testing the Fundamental Hypothesis of Pairs Trading on a Large Number of Stocks." INFORMS 2004 Annual Meeting, Denver, CO, October 24 - 27, 2004.

Gunderson, J. P. and Gunderson, L. F., "Intelligence  $\neq$  Autonomy  $\neq$  Capability", Performance Metrics for Intelligent Systems, Gaithersburg, MD, August 24 - 26, 2004.

Gunderson, J.P. and L. F. Gunderson, "Mom! The Vacuum Cleaner is Chasing the Dog Again!" Performance Metrics for Intelligent Systems, Gaithersburg, MD, September 16-18, 2003.

Gunderson, L. F. and D. E. Brown, "Teaching Robots How to Discover What Humans Want," AAAI Spring Symposia, Palo Alto, CA, March 23 – 27, 2003.

Gunderson, J.P. and L. F. Gunderson, "Integrating Effective Planning Horizons into an Intelligent Systems Architecture," Performance Metrics for Intelligent Systems, Gaithersburg, MD, August 13-15 2002.

Gunderson, L. F. and D. E. Brown, "Using Derived Preferences to Predict the Targets of Computer Crime," 17<sup>th</sup> Annual Meeting of the Brunswik Society, Orlando, FL, November 2001.

Gunderson, L. F. and D. E. Brown, "Using Derived Preferences to Predict the Targets of Computer Crime," 2nd Annual IEEE Systems, Man, and Cybernetics Information Assurance Workshop, 5-6 June 2001.

Brown, D. E. and L. F. Gunderson, "Crime Mapping for Computer Crimes," 1st Annual IEEE Systems, Man, and Cybernetics Information Assurance Workshop, 5-6 June 2000.

Gunderson, J. P. and L.F. Gunderson, "Applying Possibility Theory and Unsupervised Classification to Remotely Sensed Images that Contain Multimodal Signatures," International Institute of General Systems Studies 2nd Workshop Proceedings 1997.