

## CURRICULUM VITAE: L. DARRELL WHITLEY

### Personal Data

Birth: September 3, 1957; Glasgow, Kentucky

### Present Position

Professor and Chair, Computer Science Department, Colorado State University.

### Education

1987, M.S. Southern Illinois University at Carbondale, Computer Science

1985, Ph.D. Southern Illinois University at Carbondale, Anthropology

1980, M.A. Southern Illinois University at Carbondale, Anthropology

1978, B.A. Western Kentucky University, Anthropology and Geology

### Experience

Chair, Dept. of Computer Science, Colorado State University. (2003 – present)

Professor, Dept. of Computer Science, Colorado State University. (1997 – present)

Associate Professor, Dept. of Computer Science, Colorado State University. (1992 – 1997)

Assistant Professor, Dept. of Computer Science, Colorado State University. (1986 – 1992)

Lecturer, Dept. of Computer Science, Southern Illinois University. (1985 – 86)

Teaching Assistant, Dept. of Computer Science, Southern Illinois University. (1984 – 85)

Administrative Assistant, Dept. of Anthropology, Southern Illinois University. (1983 – 84)

### Research Interests:

Elementary Landscape Analysis– For TSP, Graph Coloring, Max-Clique, Min-Cut and k-bounded pseudo-Boolean functions such as MAX-SAT and NK-Landscapes.

Search– Stochastic Local Search methods with applications in scheduling and combinatorial optimization.

Evolutionary Algorithms– Theoretical foundations and applications of evolutionary algorithms as function optimization tools.

Machine Learning– Evolutionary Algorithms for optimizing Machine Learning tools.

### Educational Awards

1983-84 Administrative Internship, Anthropology, Southern Illinois University

1982-83 Dissertation Fellowship, Anthropology, Southern Illinois University

1981-82 Doctoral Fellowship, Anthropology, Southern Illinois University

1979-80 Masters Fellowship, Anthropology, Southern Illinois University

1978 Summa Cum Laude Graduate (GPA 3.98), Western Kentucky University

1978 Graduated “College Scholar” (1 of 5), Western Kentucky University

1977-78, 1975-76 College Heights Scholarship, Western Kentucky University

1974 Kentucky Governor’s Scholar (formerly Junior Scholar) Award.

## Select Professional Activities and Awards

- Chair of the Governing Board, ACM SIGEVO (Evolutionary Computation), 2007-2011.
- Member, ACM SIG Governing Board, 2007-2011.
- Chair of the Governing Board, International Society for Genetic Algorithms (ISGA), 1993-97.
- Founding Member of the Governing Board, International Society for Genetic and Evolutionary Computation (formerly ISGA, Now ACM SIGEVO), 1991–.
- Editor-in-Chief, 1997–2002, *Evolutionary Computation Journal*.
- Associate Editor, 1996, *Evolutionary Computation Journal*.
- Editorial Board, 1993– *Evolutionary Computation Journal*.
- Associate Editor, 2008– *Artificial Intelligence*.
- Advisory Editor, 1995– *Journal of Heuristics*.
- Associate Editor, 2007–2009 *Theoretical Computer Science*.
- Editorial Board, 2001-2003, *Journal on Artificial Intelligence Research*.
- Editorial Board, 1998-2003, *Journal on Scheduling*.
- Area Editor, Heuristic Search and Learning, *INFORMS Journal on Computing*, 1992-1997.
- Program Co-Chair, IEEE Workshop on Genetic Algorithms and Neural Networks, 1992.
- Program Chair, Foundation of Genetic Algorithms Workshop, 1992.
- Program Co-Chair, Foundation of Genetic Algorithms Workshop, 1994.
- Program Co-Chair, Foundation of Genetic Algorithms Workshop, 2007.
- General Chair, Genetic and Evolutionary Computing Conference, 2000.
- Associate Chair, Genetic and Evolutionary Computing Conference, 2001.
- Conference Co-Chair, Parallel Problem Solving from Nature, 2006.
- Co-Chair, New Chairs Workshop, Computing Research Association, “Snowbird” 2008, 2010
- Honorary Program Co-Chair, Genetic and Evolutionary Computation Summit, 2009.
- Organizer, Dagstuhl Workshop on “Theory of Evolutionary Algorithms”, 2010, 2013.
- Panel Reviewer, National Science Foundation, 1991, 93, 97, 99, 01, 02.
- Panel Reviewer, National Science Foundation, 2009, 2010, 2011.
- Resource Site Reviewer, National Institute of Health, 1991.
- Co-Chair, New Chair Workshop, CRA ”Snowbird” Conference, 2008, 2010, 2012

## Professional Awards

- Senior Fellow (1 of 10 in the inaugural class)  
International Society for Genetic and Evolutionary Computation.
- Exemplary Research Award, Colorado Advance Software Institute, 1992, 1994, 1995, 1997.
- Undergraduate Teaching Award, College of Natural Sciences, CSU, May 1993.
- Nominated, Outstanding Paper Award, AAAI, 1998.
- Best Paper Award, Multi-Interdisciplinary Scheduling, Theory and Applications (MISTA) Conference, 2003.
- PLANET Award for Research Excellence,  
European Network of Excellence in AI Planning, 2001.
- Best Paper Award, Genetic Programming Track, GECCO 2006.
- Runner-Up Best Student Paper Award (with my Ph.D. student L. Barbulescu), ICAPS 2008.
- Best Student Paper Award (with Ph.D. student M. Lunacek), PPSN 2008.
- Best Paper Award, Genetic Algorithms Track, GECCO 2009.

## Select Program Committees

- Senior Program Committee: Intern. Joint Conference on A.I. (IJCAI): 2011.
- Multi-Interdisciplinary Scheduling, Theory and Applications (MISTA) Conference, 03, 05, 07, 09, 11.
- Foundations of Genetic Algorithms (FOGA): 92, 94, 96, 98, 00, 02, 04, 06, 09, 11, 13.
- International Genetic and Evolutionary Computation Conf (GECCO): 1999, 2000, 01, 02, 2003, 04, 05, 07, 08, 09, 10, 11, 12.
- International Conf. Parallel Problem Solving from Nature (PPSN): 94, 96, 98, 00, 02 2004, 06, 08, 10, 12.
- EvoStar: 2008, 2009, 2010, 2011, 2012
- Metaheuristic International Conference, 1995, 2007.
- Genetic Programming Conference: 96, 97.
- International Conf. on Genetic Algorithms (ICGA): 91, 93, 95, 97.
- National Conference on Artificial Intelligence (AAAI): 1998, 2000.
- IEEE Evolutionary Computation Congress (CEC): 1994, 1997, 2002.
- Adaptive Computing in Design and Manufacture (ACDM): 2002, 2004, 2006, 2008

## Keynote and Plenary Addresses

- 1994, Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis.
- 1996, International Conf. Artificial Neural Networks and Genetic Algorithms, Norwich, UK.
- 1999, Spanish Society of Applied Mathematics, Gran Canaria.
- 2001, ICSE/SEMINAL Workshop on Software Engineering and Metaheuristics, Toronto.
- 2002, Adaptive Computing in Design and Manufacturing Conference, Exeter, UK.
- 2003, First Mexican Congress on Evolutionary Computation, Guanahuato, MX.
- 2007, Foundations of Genetic Algorithms, Mexico City.
- 2007, GECCO Workshop on Search Based Software Engineering, London.
- 2009, GECCO Workshop on Self Guided Metaheuristics, Montreal.
- 2009, The 9th International Conference on Artificial Evolution, Strasbourg
- 2010, The 11th International Conference on Parallel Problem Solving from Nature, Poland.
- 2011, The Symposium on Search Based Software Engineering, Szeged, Hungary
- 2011, The Computational and Mathematical Modelling Conference, Coimbatore, India
- 2011, The 5th Multidisciplinary International Conference on Scheduling Theory and Applications (MISTA), Tempe, AZ

## Select Tutorials

- *Genetic Algorithms and Evolutionary Computation*: AAAI-98, AAAI-99, IJCAI-03.
- *Genetic Algorithm Theory*: ICGA 1993, 1995; GECCO 1999, 2001.
- *Genetic Algorithms and Neural Networks*: PPSN 1994, GECCO 1999, CEC 1997.
- *No Free Lunch for Search*: GECCO 2001, 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010.
- *Evaluating Evolutionary Algorithms*: PPSN 2002, GECCO 2003.
- *Evolutionary Algorithms for Optimization*: PPSN 2004.
- *Practical Guidelines for Using Evolutionary Algorithms*: IEEE-CEC 2005, PPSN 2006.
- *Elementary Landscapes*: GECCO 2009, 2012.

## Publications

### Theses:

*Genetic Algorithms and Machine Learning*, Master of Science, Computer Science Department, Southern Illinois University, Carbondale, Illinois. 1987.

*Beyond Decision Making: Rational and Irrational Information Processing in a Rural Baptist Farming Community*, Doctor of Philosophy, Department of Anthropology, Southern Illinois University, Carbondale, Illinois. 1985.

### Edited Books and Proceedings:

1. C. Stephens, P. Stadler, M. Toussaint and D. Whitley (2007). *Foundations of Genetic Algorithms 9*. Springer. Lecture Notes in CS, Volume 4436
2. T.P. Runarsson, H.G. Beyers, E. Burke, J.J. Merelo-Guervos, L.D. Whitley, X. Yao (2006). *Parallel Problem Solving from Nature, PPSN IX*, Springer.
3. D. Whitley, D. Goldberg, E. Cantu-Paz, L. Spector, I. Parmee, H.G. Beyers (2000). *Genetic and Evolutionary Computation Conference*, Morgan Kaufmann.
4. D. Whitley, M. Vose, K. DeJong and L. Davis, eds. (1998) *Proceedings of the IMA (Institute for Mathematics and its Applications) Workshop on Evolutionary Algorithms*. Springer Verlag.
5. Darrell Whitley and Michael Vose (1995). *Foundations of Genetic Algorithms 3*. Morgan Kaufmann.
6. Darrell Whitley (1993). *Foundations of Genetic Algorithms 2*. Morgan Kaufmann.
7. Darrell Whitley and David J. Schaffer (1992). *Combinations of Genetic Algorithms and Neural Networks*. IEEE Computer Society Press.

## Journal Papers:

1. Rinku Dewri, Indrajit Ray, Indrakshi Ray, D. Whitley (2012) Utility Driven Optimization of Real Time Data Broadcast Schedules. *Applied Soft Computing*. 12(7):1832-1846.
2. Rinku Dewri, Indrajit Ray, Nayot Poolsappasit, D. Whitley (2012) Optimal Security Hardening on Attack Tree Models of Networks: A Cost-Benefit Analysis. *International Journal of Information Security*. 11(3):167-188.
3. A. Sutton, D. Whitley, A. Howe (2012) Computing the moments of k-bounded pseudo-Boolean functions over Hamming spheres of arbitrary radius in polynomial time. *Theoretical Computer Science*, 425:58-74.
4. F. Chicano, D. Whitley, E. Alba (2011) A Methodology to Find the Elementary Landscape Decomposition of Combinatorial Optimization Problems. *Evolutionary Computation*, 19(4):597-637.
5. F. Chicano, D. Whitley, E. Alba, F Luna (2011) Elementary Landscape Decomposition of the Frequency Assignment Problem. *Theoretical Computer Science* 412(43,7):6002-6019.
6. Rinku Dewri, Indrajit Ray, Indrakshi Ray, D. Whitley (2011) Exploring Privacy versus Data Quality Trade-offs in Anonymization using Multi-objective Optimization. *Journal of Computer Security* 19(5). (May 2011).
7. Rinku Dewri, Indrakshi Ray, Indrajit Ray, D. Whitley (2011) k-Anonymization in the Presence of Publisher Preferences. *Transactions on Knowledge and Data Engineering*. (May 2011).
8. D. Hains, D. Whitley, A. Howe (2010) Revisiting the Big Valley Search Space Structure for the TSP. *Journal of the Operations Research Society*. 62:305-312.
9. Rinku Dewri, D. Whitley, Indrakshi Ray, Indrajit Ray (2010) Real Time Stochastic Scheduling in Broadcast Systems with Decentralized Data Storage. *Real Time Systems*. 45(3):143-175.
10. Yui Man Lui, J.R. Beveridge, L.D. Whitley (2010) Adaptive Appearance Model and Condensation Algorithm for Robust Face Tracking. *IEEE Transactions on Systems Man and Cybernetics, Part A: Systems and Humans*.
11. Jesse Wilson, Philip Schlup, Monte Lunacek, Darrell Whitley, and Randy Bartels (2008) Calibration of liquid crystal ultrafast pulse shaper with common-path spectral interferometry and application to coherent control with a CMA evolutionary strategy. *Review of Scientific Instruments* 79(3):033103-5.
12. Artem Sokolov, Andre' Barreto and Darrell Whitley (2007). On the Variance of Rank-Based Selection Strategies for Genetic Algorithms and Genetic Programming. *Genetic Programming and Evolving Machines*. 8(3):221-237
13. L. Barbulescu, A.E. Howe, L.D. Whitley and M. Roberts (2006). Algorithm Performance Factors for an Oversubscribed Scheduling Application. *Journal of Artificial Intelligence Research (JAIR)*. 27:577-615.
14. D. Whitley and J. Rowe (2006). Subthreshold Seeking Local Search. *Theoretical Computer Science*. 361:2-17.

15. J.P. Watson, A.E. Howe and L.D. Whitley (2006). Deconstructing Nowicki and Smutnicki's i-TSAB Tabu Search Algorithm for the Job-Shop Scheduling Problem. *Computers and Operations Research*. "Anniversary Focused Issue on Tabu Search" 33(9):2623-2644.
16. L. Barbulescu, A.E. Howe and D. Whitley (2006). AFSCN Scheduling: How the Problem and the Solution Have Evolved. *Mathematical and Computer Modeling*. 43(9/10):1023-1037.
17. J.P. Watson, L.D. Whitley and A.E. Howe (2005). Linking Search Space Structure, Run-Time Dynamics, and Problem Difficulty: A Step Toward Demystifying Tabu Search, *Journal of Artificial Intelligence Research (JAIR)*. 24:221-261.
18. L. Barbulescu and J.P. Watson and D. Whitley and A. Howe (2004). Scheduling Space-Ground Communications for the Air Force Satellite Control Network. *Journal of Scheduling*, 7(1):7-34.
19. J. Rowe, D. Whitley, L. Barbulescu and J.P. Watson (2004). Properties of Gray and Binary Representations. *Evolutionary Computation* 12(1): 47-76.
20. D. Whitley, R. Heckendorn and S. Rana (2003). Nonlinear, Hyperplane Ranking and the Simple Genetic Algorithm. *Information Sciences*, 156:123-145.
21. J.P. Watson, J.C. Beck, A.E. Howe, L.D. Whitley (2003) Problem Difficulty for Tabu Search in Job-Shop Scheduling, *Artificial Intelligence* 143:189-217.
22. J.P. Watson, L. Barbulescu, L.D. Whitley, A.E. Howe (2002) Contrasting Structured and Random Permutation Flow-Shop Scheduling Problems: Search Space Topology and Algorithm Performance, *INFORMS Journal on Computing*, 14(2):98-123.
23. R. Beveridge, C. Ross, D. Whitley and B. Fish (2002). Augmented geophysical data interpretation through automated velocity picking in semblance velocity images. *Machine Vision and Applications*. 13:141-148.
24. D. Whitley (2001). An Overview of Evolutionary Algorithms. *Journal of Information and Software Technology*. 43:817-831.
25. R. Beveridge, K. Balasubramaniam and D. Whitley (2000). Matching Horizon Features using a Messy Genetic Algorithm. *Computer Methods in Applied Mechanics and Engineering*. 186(2-4):499-516.
26. J.P. Watson, S. Rana, D. Whitley and A. Howe (1999). The Impact of Approximate Evaluation on the Performance of Search Algorithms for Warehouse Scheduling. *Journal on Scheduling* 2(2): 79-98.
27. D. Whitley, S. Rana and R. Heckendorn (1999). The Island Model Genetic Algorithm: On Separability, Population Size and Convergence. *Journal of Computer and Information Technology* 7(1): 33-47.
28. R. Heckendorn and D. Whitley (1999). Predicting Epistasis from Mathematical Models. *Evolutionary Computation* 7(1): 69-101.
29. S. Rana, A. Howe, D. Whitley and K. Mathias (1997). A Genetic Algorithm Scheduler: Assessing the Contribution of Search, Heuristics and the Objective Function. *Engineering Design and Automation Journal*, 3(2): 107-118.

30. D. Whitley, K. Mathias, S. Rana and J. Dzubera (1996). Evaluating Evolutionary Algorithms. *Artificial Intelligence*, 85: 1-32.
31. D. Whitley, R. Beveridge, K. Mathias and C. Graves (1995). Testing Driving Three 1995 Genetic Algorithms. *Journal of Heuristics*, 1: 77-104.
32. D. Whitley. A Genetic Algorithm Tutorial (1994). *Journal of Statistics and Computing*. Vol 4. pp: 65-85.
33. S. Gordon and D. Whitley (1994). A Machine Independent View of Parallel Genetic Algorithms. *Complex Systems*, 8:181-214.
34. N. Karunanithi, W. Grenney, D. Whitley and K. Bovee (1994). Neural Networks for River Flow Prediction. *Journal of Computing in Civil Engineering* . Vol 8. No. 2 pp: 201-220.
35. K. Mathias and D. Whitley (1994). Changing Representation during Genetic Search: A Comparative Study of Delta Coding. *Evolutionary Computation*, 2(3):249-278.
36. F. Gruau and D. Whitley (1993). Adding Learning to the Cellular Development of Neural Networks: Evolution and the Baldwin Effect. *Evolutionary Computation*, 1(3):213-233.
37. D. Whitley, S. Dominic, R. Das and C. Anderson (1993). Genetic Reinforcement Learning for Neurocontrol Problems. *Machine Learning*, 13:259-284.
38. D. Whitley, C. Crabb and R. Das (1992). Tracking Primary Hyperplane Competitions During Genetic Search. *Annals of Mathematics and Artificial Intelligence*. 6:367-388.
39. D. Whitley (1992). Deception, Dominance and Implicit Parallelism in Genetic Search. *Annals of Mathematics and Artificial Intelligence*. 5:49-78.
40. N. Karunanithi, D. Whitley and Y. Malaiya (1992). Prediction of Software Reliability Using A Connectionist Approach. *IEEE Trans. on Software Engineering*. 18(7):563-574.
41. N. Karunanithi, D. Whitley and Y. Malaiya (1992). Applying Neural Networks to Software Reliability Prediction. *IEEE Software*, July 1992. pp:53-59.
42. D. Whitley and T. Starkweather (1990). GENITOR II: A Distributed Genetic Algorithm. *Journal of Experimental and Theoretical Artificial Intelligence* 2:189-214.
43. D. Whitley, T. Starkweather and C. Bogart (1990). Genetic Algorithms and Neural Networks: Optimizing Connections and Connectivity. *Parallel Computing* 14:347-361.
44. R. Corruccini, D. Whitley, S. Kaul, L. Flander and C. Morrow (1985). Facial Height and Breadth Relative to Dietary Consistency and Oral Breathing in Two Populations, in: *Human Biology* 57:151-161.
45. R. Corruccini and D. Whitley (1981). Occlusal Variation in a Rural Kentucky Community, in: *American Journal of Orthodontics* 79:250-262.

## Book Chapters and Invited Papers:

1. D. Whitley (2011) Exploiting Decomposability Using Recombination in Genetic Algorithms *Symposium on Search-Based Software Engineering 2011*. (Invited Paper).
2. D. Whitley (2011) Quasi-Elementary Landscapes. *Multidisciplinary International Conference on Scheduling: Theory and Applications*, MISTA-2011. (Invited Paper).
3. D. Whitley and J. Rowe (2010) A No Free Lunch Tutorial: Sharpened and Focused No Free Lunch In : A. Auger and B. Doerr, eds., *Theory of Randomized Search Heuristics: Foundations and Recent Developments*, World Scientific. pp: 255-288.
4. R. Dewri, Ij. Ray, Ik. Ray and D. Whitley (2009) Multi-Objective Evolutionary Optimization in Statistical Disclosure Control, In, *Advances in Artificial Intelligence for Privacy Protection and Security*. Imperial College Press.
5. D. Whitley, Andrew Sutton, Adele Howe and Laura Barbulescu (2008) Resource Scheduling with Permutation Based Representations In, *Evolutionary Computation in Practice*, L. Davis, T. Wu, eds. Springer.
6. D. Whitley and J. P. Watson (2005) Complexity Theory and the No Free Lunch Theorem In, *Search Methodologies*, E. Burke and G. Kendall, eds., Springer.
7. D. Whitley (2002). Genetic Algorithms and Evolutionary Computing. *Van Nostrand's Scientific Encyclopedia*.
8. D. Whitley, J.P. Watson, A. Howe and L. Barbulescu (2002). Testing, Evaluation and Performance of Optimization and Learning Systems. *Adaptive Computing in Design and Manufacturing*. pp: 27-39.
9. L. Barbulescu, J.P. Watson, L.D. Whitley and A.E. Howe (1999). Problem structure and flowshop scheduling *Actas, VI Congreso de Matematica Aplicada, Spanish Society of Applied Mathematics*. R. Montenegro, G. Montero, and G. Winter, eds. Vol 1, pp: 27-38.
10. S. Rana and D. Whitley (1998). Search, Binary Representations, and Counting Optima. *Institute for Mathematics and its Applications Workshop on Evolutionary Algorithms*. D. Whitley, M. Vose, K. DeJong and L. Davis, eds. Springer Verlag.
11. D. Whitley, S. Rana and R. Heckendorn (1997). Representations Issues in Neighborhood Search and Evolutionary Algorithms. In *Genetic Algorithms and Evolution Strategies in Engineering and Computer Science*, D. Quagliarella, J. Periaux, C. Poloni and G. Winter, eds., pp. 39–57. Wiley.
12. K. Mathias, D. Whitley, T. Kusuma, and C. Stork (1996). An Empirical Evaluation of Genetic Algorithms on Noisy Objective Functions, In *Genetic Algorithms for Pattern Recognition*, S.K. Pal, ed. CRC Press. pp: 65-86.
13. D. Whitley (1996). Permutations. Chapter of the *Handbook on Evolutionary Computation*. Oxford University Press.
14. D. Whitley, V.S. Gordon, A.W.P. Bohm (1996). Knapsack Problems. Chapter of the *Handbook on Evolutionary Computation*. Oxford University Press.



15. D. Whitley (1995). Genetic Algorithms and Neural Networks. In *Genetic Algorithms in Engineering and Computer Science*, G. Winter, J. Periaux, M. Galan, and P. Cuesta, eds., pp. 203–216. Wiley.
16. D. Whitley (1995). Modeling Hybrid Genetic Algorithms. *Genetic Algorithms in Engineering and Computer Science*. G. Winter, J. Periaux, M. Galan, and P. Cuesta, eds., pp. 191–201. Wiley.
17. J.D. Schaffer, D. Whitley and L. Eshelman (1992). Combinations of Genetic Algorithms and Neural Networks: A Survey of the State of the Art. *Combination of Genetic Algorithms and Neural Networks*. J.D. Schaffer and D. Whitley, eds. IEEE Computer Society Press. pp: 1-37.

### Refereed Conference Papers and Book Chapters:

1. D. Whitley, W. Chen and A. Howe (2012) An Empirical Evaluation of O(1) Steepest Descent for NK-Landscapes. *Parallel Problem Solving from Nature, PPSN 12*, Springer.
2. D. Hains, D. Whitley and A. Howe (2012) Improving Lin-Kernighan-Helsgaun with Crossover on Clustered Instances of the TSP. *Parallel Problem Solving from Nature, PPSN 12*, Springer.
3. D. Whitley and W. Chen (2012) Constant Time Steepest Descent Local Search with Lookahead for NK-Landscapes and MAX-kSAT. *Genetic and Evolutionary Computation Conference, GECCO-2011*. ACM Press.
4. F. Chicano, D. Whitley and E. Alba (2012) Exact Computation of the Expectation Curves for Uniform Crossover *Genetic and Evolutionary Computation Conference, GECCO-2011*. ACM Press.
5. D. Whitley and F. Chicano (2012) Quasi-Elementary Landscapes and Superpositions of Elementary Landscapes. *Learning and Intelligent Optimization Conference, LION-2012*.
6. A. Sutton, D. Whitley and A.E. Howe (2011) Approximating the Distribution of Fitness over Hamming Regions. *Foundations of Genetic Algorithms-2011* ACM Press.
7. A. Sutton, D. Whitley and A.E. Howe (2011) Mutation Rates of the (1+1)EA on Pseudo-Boolean Functions of Bounded Epistasis. *Genetic and Evolutionary Computation Conference, GECCO-2011*. ACM Press.
8. D. Whitley and G. Ochoa (2011) Partial Neighborhoods of the Traveling Salesman Problem. *Genetic and Evolutionary Computation Conference, GECCO-2011*. ACM Press.
9. D. Whitley, F. Chicano, E. Alba, F. Luna (2010) Elementary Landscapes of Frequency Assignment Problems. *Genetic and Evolutionary Computation Conference, GECCO-2010*. ACM Press.
10. A.M. Sutton, A.E. Howe and L.D. Whitley (2010) Directed Plateau Search for MAX-k-SAT. *Third Annual Symposium on Combinatorial Search (SOCS)*.
11. D. Whitley, D Hains and A. Howe (2010) A Hybrid Genetic Algorithm for the Traveling Salesman Problem using Generalized Partition Crossover. *Parallel Problem Solving from Nature, PPSN 10*, Springer.

12. R. Dewri, I. Ray, I. Ray, D. Whitley (2010) Historical k-Anonymous Anonymity Sets in an Continuous LPS. International Conference on Security and Privacy in Communication Networks (SecureComm), Singapore, 2010. (Acceptance Rate:0.25)
13. R. Dewri, I. Ray, I. Ray, D. Whitley (2010) On the Identification of Property Based Generalization in Microdata Anonymization. 24th IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec), pp.81-96, Rome. (Acceptance Rate:0.30)
14. R. Dewri, I. Ray, I. Ray, D. Whitley (2010) Query m-Invariance: Preventing Query Disclosures in Continuous Location-Based Services. IEEE International Conference on Mobile Data Management (MDM), pp. 95-104. (Acceptance Rate:0.25)
15. A.M. Sutton, A.E. Howe and L.D. Whitley (2009) Estimating Bounds on Expected Plateau Size in MAXSAT Problems. *Proceeding of the Stochastic Local Search Workshop*, Lecture Notes in Computer Science, Vol. 5752, pp:31-45. Springer.
16. A.M. Sutton, A.E. Howe and L.D. Whitley (2009) A theoretical analysis of the k-satisfiability search space. *Proceeding of the Stochastic Local Search Workshop*, Lecture Notes in Computer Science, Vol. 5752, pp:46-60. Springer.
17. A.M. Sutton, L.D. Whitley and A.E. Howe (2009) A polynomial time computation of the exact correlation structure of k-satisfiability landscapes. *Genetic and Evolutionary Computation Conference*, GECCO-2009. ACM Press.
18. D. Whitley and A. Sutton (2009) Partial Neighbors of Elementary Landscapes. *Genetic and Evolutionary Computation Conference*, GECCO-2009. ACM Press.
19. D. Whitley, D Hains and A. Howe (2009) Tunneling Between Optima: the Partition Crossover for the Traveling Salesman Problem. (Best paper award, Genetic Algorithms Track.) *Genetic and Evolutionary Computation Conference*, GECCO-2009. ACM Press.
20. R. Dewri, D. Whitley, Ij. Ray and Ik. Ray (2009) A Multi-Objective Approach to Data Sharing with Privacy Constraints and Preference Based Objectives. *Genetic and Evolutionary Computation Conference*, GECCO-2009. ACM Press.
21. R. Dewri, Ij. Ray, Ik. Ray and D. Whitley (2009) POkA: Identifying Pareto-Optimal k-Anonymous Nodes in a Domain Hierarchy Lattice. *Proceedings of the 18th ACM Conference on Information and Knowledge Management*, ACM Press.
22. R. Dewri, Ij. Ray, Ik. Ray and D. Whitley (2009) On the Comparison of Microdata Disclosure Control Algorithms, *12th Intern. Conf. on Extending Database Technology*.
23. R. Dewri, Ik. Ray, Ij. Ray and D. Whitley (2008) Optimizing Real-Time Ordered-Data Broadcasts in Pervasive Environments Using Evolution Strategy, *Parallel Problem Solving from Nature*, PPSN-2008. Springer.
24. R. Dewri, Ik. Ray, Ij. Ray and D. Whitley (2008) Security Provisioning in Pervasive Environments Using Multi-objective Optimization, *13th European Symposium on Research in Computer Security (ESORICS)*, Malaga, Spain, October 6-8, 2008.
25. M. Lunacek, D. Whitley and A. Sutton (2008) The Impact of Global Structure on Search, *Parallel Problem Solving from Nature*, PPSN-2008. Springer. *Winner of the Best Student Paper Award*

26. D. Whitley and J. Rowe (2008) Focused No Free Lunch Theorems *Genetic and Evolutionary Computation Conference*, GECCO-2008. ACM Press.
27. D. Whitley, A. Sutton and A. Howe (2008) Understanding Elementary Landscapes *Genetic and Evolutionary Computation Conference*, GECCO-2008. ACM Press.
28. R. Dewri, Ij. Ray, Ik. Ray and D. Whitley. (2008) “On the Optimal Selection of k in the k-Anonymity Problem”, in *Proc. 22nd IEEE International Conference on Data Engineering (ICDE)*, April 2008, Cancun, Mexico.
29. R. Dewri, Ik. Ray, Ij. Ray and D. Whitley, (2008) “Optimizing On-Demand Data Broadcast Scheduling in Pervasive Environments,” in *Proc. 11th International Conference on Extending Database Technology (EDBT)*, March 2008, Nantes, France.
30. Y.M. Lui, J.R. Beveridge and L.D. Whitley. (2008) “A Novel Appearance Model and Adaptive Condensation Algorithm for Human Face Tracking”, in *IEEE Second International Conf on Biometrics: Theory, Applications and Systems*, Washington, D.C.
31. R. Dewri, N. Poolsappasit, Ij. Ray and D. Whitley, (2007) “Optimal Security Hardening Using Multi-Objective Optimization on Attack Tree Models of Networks,” *Proc. 14th ACM Conference on Computer and Communications Security (CCS)*, Alexandria, VA
32. A. Sutton, A.E. Howe and L.D. Whitley. (2007) “Using Adaptive Priority Weighting to Direct Search in Probabilistic Scheduling”, in *Proc. of International Conference on Automated Planning and Scheduling 2007*, Providence, RI.
33. Y.M. Lui, J.R. Beveridge, A.E. Howe and L.D. Whitley. (2007) “Evolution Strategies for Matching Active Appearance Models to Human Faces”, in *Proceedings of the First Conference on Biometrics: Theory, Applications and Systems*, Washington, D.C. *Honorable Mention Best Student Paper*.
34. A. Sutton, M. Lunacek and D. Whitley (2007). Differential Evolution and Non-Separability: Using selective pressure to focus search. *Genetic and Evolutionary Computation Conference*, GECCO-2007. pp 1428-1435. ACM Press.
35. M. Lunacek and D. Whitley (2006). Searching for Balance: Understanding Self-Adaptation on Ridge Functions. *Parallel Problem Solving from Nature*, PPSN-2006. Springer.
36. D. Whitley, M. Lunacek, A. Sokolov (2006) Comparing the Niches of CMA-ES, CHC and Pattern Search Using Diverse Benchmarks. *Parallel Problem Solving from Nature*, PPSN-2006. Springer.
37. M. Lunacek, D. Whitley and IK Ray (2006). A crossover operator for the K-anonymity problem *Genetic and Evolutionary Computation Conference*, GECCO-2006. pp 1713-1720. ACM Press.
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### **Workshop, Posters and Conference Papers (with higher acceptance rates)**

1. R. Dewri, D. Whitley, I. Ray and Ij. Ray (2008) Evolution Strategy Based Optimization for On-Demand Dependent Data Broadcast Scheduling, *GECCO 2008*, ACM Press.
2. A. Sanyal, A. Sokolov, Y. Malaiya, D. Whitley (2007). A Co-evolutionary Algorithm for Dynamic Power During Scan Test. *IEEE North Atlantic Test Workshop NATW-2007*. pp. 13-18. (Best Student Paper Award.)
3. A. Sokolov, A. Sanyal, D. Whitley Y. Malaiya (2005). Dynamic Power Minimization During Combinational Circuit Testing as a Traveling Salesman Problem. *IEEE Congress on Evolutionary Computation, CEC-2005*.
4. A. Howe, D. Whitley, J.P. Watson and L. Barbulescu (2000). Mixed Initiative Scheduling for the Air Force Satellite Control Network. *NASA Planning and Scheduling Workshop*.
5. C. Guerra, D. Whitley (1999). Search algorithms for Subset Feature Selection. *IEEE Congress on Evolutionary Computation, CEC-99*.
6. L. D. Whitley, A. E. Howe, S. Rana, J. P. Watson, L. Barbulescu (1998). Comparing Heuristic Search Methods and Genetic Algorithms for Warehouse Scheduling. Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, San Diego, CA.
7. K. Mathias and D. Whitley (1994). Noisy function evaluation and the delta-coding algorithm. *SPIE Proceedings Vol. 2304. Neural and Stochastic Methods in Image and Signal Processing*.
8. D. Fuquay and D. Whitley (1990). Genetic Algorithm Solutions for the Traveling Salesman Problem. *Proc. 28th Southeast Regional ACM Conference*.
9. D. Whitley, T. Starkweather and D. Fuquay (1989). Genetic Algorithm Applications: Neural Networks, Traveling Salesmen and Schedules. *Proc. Fourth Annual Rocky Mountain Conference on Artificial Intelligence* Denver, CO.
10. D. Whitley and J. Kauth (1988). GENITOR: A Different Genetic Algorithm. *Proc. Rocky Mountain Conference on Artificial Intelligence*, pp. 118-130.

11. D. Whitley, and H. Davidson (1987). The Role of Inversion in Genetic Search. *Proc. Rocky Mountain Conference on Artificial Intelligence*, pp. 225-241. Boulder, CO.
12. D. Whitley (1977). Karst Topography and its Occurrence in Kentucky, in: *Hydrologic Problems in Karst Regions*. S. Csallany and R. Dilamarter (Eds.) Western Kentucky University Press: Bowling Green, KY.

## Abstracts and Reviews

1. D. Whitley (1993). Cellular Genetic Algorithms. *International Conference on Genetic Algorithms*. Morgan Kaufmann.
2. D. Whitley (1989). Using Genetic Recombination to Optimize Neural Networks. (ABSTRACT) *International Joint Conference on Neural Networks-89*.
3. D. Whitley (1988). Applying Genetic Algorithms to Neural Network Problems (ABSTRACT) *Neural Networks* Vol. 1, Supplement 1:230.
4. D. Whitley (1990). Genetic Algorithms and Neural Networks. A review of D. Montana and D. Davis, "Training Feedforward Neural Networks Using Genetic Algorithms." *Neural Networks Review Journal* 4(1):47-49.
5. D. Whitley (1990). A Reply to de Garis. *Neural Networks Review Journal* 4(1):52-53.

## Selected Invited Talks

- Deception and Genetic Search.* Workshop on Foundations of Genetic Algorithms. Indiana University, Bloomington. July 1990.
- Applications of Genetic Algorithms in Scheduling, Image Processing and Neural Networks.* Army Research Office Workshop on Genetic Algorithms, Research Triangle, NC. March 1991.
- Genetic Algorithms for Neurocontrol Applications.* Business Communication International, Workshop on Neural Networks and Genetic Algorithms. London. February 1992.
- A Review of Models of the Simple and Cellular Genetic Algorithm.* Unicom. London. January 1994.
- The Role of Hyperplane Ranking in Genetic Search.* Santa Fe Institute, Santa Fe, NM. April 1994.
- Genetic Algorithms and the Fitness Landscape.* Santa Fe Institute, Santa Fe, NM. July 1995.
- Hybrid Genetic Algorithms.* EUROGEN Short Course on Evolutionary Computation. Gran Canaria, Spain, January 1996.
- Parallel Genetic Algorithms.* High Performance Scientific Computing Conference, Rio de Janeiro, Brazil, July 1997.
- Representations Issues in Neighborhood Search and Evolutionary Algorithms.* EUROGEN Short Course on Evolutionary Computation. Trieste, Italy, December 1997.
- No Free Lunch and NP Completeness.* University of Birmingham, England, April 2002. University of London City College, UK, Oct 2002.
- Subset Feature Selection Algorithms.* SEMINAL Workshop. Cumberland Lodge, Windsor Castle Park, UK. April 2002.
- Local Search Algorithms: Variants and Enhancements.* SEMINAL Workshop. Cumberland Lodge, Windsor Castle Park, UK. October 2002.
- No Free Lunch and Scheduling.* University of Nottingham, UK, Oct 2002. University of East Anglia, Norwich, UK, Oct 2002.
- No Free Lunch and Representation.* University of Illinois, Champaign-Urbana, Nov. 2002.
- New Insights about No Free Lunch.* Santa Fe Institute, April, 2004.
- Search, Precision and Rotated Representations.* Sandia National Labs, April, 2004.
- Evolving Teams of UAVs.* University of Nevada, Reno, November, 2005.
- Understanding Elementary Landscapes.* University of Nottingham, July 2009.
- Tunneling Between Local Optima on the Traveling Salesman Problem.* University of Nottingham, July 2009.
- Understanding Elementary Landscapes.* University of London, King's College, July 2009.

*Tunneling Between Local Optima on the Traveling Salesman Problem.* University of London, King's College, July 2009.

*Understanding Elementary Landscapes.* University of Paris (Orsay), September 2009.

*Understanding Elementary Landscapes.* University of Valencia, November 2009.

*Talking to Satellites: Scheduling Satellite Communications.* University of Valencia, November 2009.

*An Introduction to Evolutionary Algorithms.* University of Cadiz, November 2009.

*Genetic Algorithms and Neural Networks.* University of Cadiz, November 2009.

*Evolutionary Algorithms and the Traveling Salesman Problem.* University of Malaga, November 2009.

*Comparing Evolutionary Algorithms.* University of Malaga, December 2009.

*Evolutionary Algorithms and the Traveling Salesman Problem.* University of Granada, December 2009.

## Contracts and Grants

*Finding Communities as Densely Connected Subgraphs.*

Sponsor: Northrop

Amount: \$30,000      Period: 1/2012–8/2012

*Exploiting Elementary Landscapes.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$499,881      Period: 6/2011–6/2014

*Landscape Analysis and Algorithm Development for Plateau Plagued Search Spaces.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$302,775      Period: 8/2008–11/2010

*Model Justified Search Algorithms for Scheduling Under Uncertainty.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$162,724      Period: 4/2007–5/2008

*An Analysis of Two Population-Based Search Methods.*

Sponsor: Sandia National Labs

Amount: \$14,817      Period: 7/2006–12/2006

*Scheduling Under Uncertainty: An Analysis of Air Force Applications.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$25,000      Period: 6/2006–11/2006

*Intelligent Agents for Severe Weather Tracking.*

Co-PIs: Ross Beveridge and Wade Troxell

Sponsor: Raytheon

Amount: \$100,000      Period: 8/2005–6/2006

*Coevolving Cooperative Teams of Agents.*

Co-PI: Ross Beveridge

Sponsor: Raytheon

Amount: \$50,000      Period: 5/2004–12/2004

*Advancing Air Force Scheduling Through Modeling Problem Topologies.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$405,000      Period: 4/2003–3/2006

*Adaptive Representations for Genetic Algorithms and Local Search.*

Sponsor: National Science Foundation

Amount: \$ 265,119      Period: 8/2001–8/2004

*Interactive Anticipatory Scheduling for Resource Allocation Problems.*

with: Adele Howe

Sponsor: Air Force Office of Scientific Research

Amount: \$344,345      Period: 1/2000–12/2002

- Exploiting Problem Structure for Scheduling Problems.*  
with: Adele Howe  
Sponsor: Air Force Office of Scientific Research  
Amount: \$ 390,408      Period: 4/97-8/2000
- Evaluating Machine Learning Methods for Data Mining.*  
Sponsor: Colorado Advances Software Institute (CASI).  
Industry Collaborator: RML Technologies, Littleton, CO.  
Amount: \$34,000      Period: 8/2000–8/2001
- Adaptive Intelligent Methods for Distributed Learning and Data Mining.*  
Co-PI: Bruce Draper and Adele Howe  
Sponsor: TRW  
Amount: \$161,309      Period: 8/2000–5/2001
- Automated Velocity Picking: A Computer Vision and Optimization Approach.*  
Co-PI: Ross Beveridge  
Sponsor: Colorado Advanced Software Inst. (CASI) and Landmark Graphics.  
Amount: \$ 34,000      Period: 9/97-8/98
- The First Break Seismic Detection Problem.*  
Sponsor: Colorado Advanced Software Inst. (CASI) and Advance Geophysical.  
Amount: \$ 44,110      Period: 9/96-8/97
- Comparisons and Applications of Local and Global Search.*  
Co-PI: Ross Beveridge  
Sponsor: National Science Foundation  
Amount: \$ 240,000      Period: 8/95-8/98
- A Comparative Study of Search Methods for Seismic Problems.*  
Sponsor: Colorado Advanced Software Inst. (CASI) and Advance Geophysical.  
Amount: \$ 43,845      Period: 9/95-8/96
- Generalized Hybrid Genetic Search for Seismic Inversion Problems.*  
Sponsor: Colorado Advanced Software Inst. (CASI) and Advance Geophysical.  
Amount: \$ 31,000      Period: 9/94-8/95
- Multiprocessor and Sensor Hardware for Vision, Learning, Planning and Parallel Processing Research.*  
Co-PI With: R. Beveridge, C. Anderson, W. Bohm, M. Goss, D. Whitley  
Sponsor: National Science Foundation, CISE Instrumentation Grant.  
Amount: \$39,429
- Genetic Optimization of Cellular Encodings for Neural Networks.*  
Sponsor: National Science Foundation  
Amount: \$ 187,573      Period: 4/94-8/97
- Applying Genetic Algorithms to Neural Net Optimization Problems.*  
Sponsor: National Science Foundation  
Amount: \$ 73,270      Period: 9/90-8/92  
(Includes additional \$ 5,000 Research Experience for Undergraduates (REU) award.)



*A Scheduling Application Using Genetic Algorithms.*

Sponsor: Coors Brewing Company.

Amount: \$ 80,504      Period: 6/91-7/93

*Applications of Neural Networks.*      Sponsor: Texaco.

Amount: \$ 34,142      Period: 9/93-8/94

*Global Optimization for Geophysical Applications Using Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Advanced Geophysical.

Amount: \$ 31,700      Period: 9/93-8/94

*Global Optimization for Geophysical Applications Using Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Amoco Production, Denver.

Amount: \$ 28,952      Period: 9/92-8/93

*Signal Detection Using Neural Networks and Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Texas Instruments.

Amount: \$ 21,500      Period: 9/90-8/91

*Signal Detection: An Application of Neural Networks and Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Texas Instruments.

Amount: \$ 26,576      Period: 9/89-8/90

*A General Approach to Scheduling Using Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Coors

Amount: \$ 26,576      Period: 9/89-8/90

*Optimizing Neural Nets Using Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Texas Instruments.

Amount: \$ 29,930      Period: 9/88-8/89

*Solving Generic Scheduling Problems Using Genetic Algorithms.*

Sponsor: Colorado Institute for AI (CIAI) and Helwett-Packard.

Amount: \$ 23,203      Period: 1/88-12/88

## Selected Reviewing Activities

Science	Artificial Intelligence
Evolutionary Computation	Journal of AI Research
Operations Research	J. of Approximate Reasoning
Machine Learning	Computers and Operations Research
Neural Networks	Statistics and Computing
Journal on Scheduling	IEEE Trans. Evolutionary Computation
IEEE Expert	IEEE Trans. Pattern Analysis and Machine Intelligence
Parallel Computing	Experimental and Theoretical Artificial Intelligence
Transportation Science	IEEE Trans. Systems, Man and Cybernetics
Journal on Heuristics	Annals of Mathematics and Artificial Intelligence
INFORMS J. on Computing	Mathematics and Management Sciences
Intelligent Manufacturing	IEEE Trans. Knowledge and Data Engineering
Information Processing Letters	Chemical Engineering and Computers
J. Global Optimization	Computing and Information Science in Engineering
National Science Foundation	National Science Foundation of Ireland
NASA	National Institute of Health
The Swedish Research Council	Montana MONTS Research Awards

National Sciences and Engineering Research Council (NSERC) of Canada.

External Department Reviewer, Computer Science, U. New Mexico, 2010.

## Selected Internal Service Activities

- Department Executive Committee, 1995 to 2001.
- CSU Representative, Colorado Institute for Advanced Software, 1995 to 1999, 2001
- Faculty Search Committee Chair: 2000, 2001. Member: 1999

## Teaching Activities at Colorado State University

I developed the original sequence of courses in Artificial Intelligence at Colorado State University. These classes are CS440, CS540 and CS640-641. I also taught the first class in Machine Learning, CS580 (now CS545). Between 1994 and 1998 I devoted a good deal of energy to teaching and redefining the theory sequence: CS201, CS301 and CS420. I played a role in developing notes for all of these classes. Of course, much of this was replaced since 2003.

*CS440 Introduction to Artificial Intelligence.* Traditional Symbolic Artificial Intelligence, Search, Automated Reasoning, Lisp and Prolog Programming, Machine Learning.

*CS540 Artificial Intelligence.* A survey of artificial intelligence methods and applications covering topics such as search, natural language understanding, planning, neural networks, machine learning and evolutionary algorithms.

*CS580 Machine Learning.* Decision Trees, Neural Networks, Genetic Algorithms, Clustering methods and feature selection.

*CS640 and 641, Advanced Topics in Artificial Intelligence.* This year long seminar is built around the review and criticism of recent publications in neural networks, genetic algorithms and machine learning. Students must also generate a research proposal in the fall CS640 class and execute the research in the spring CS641 class.

### Other Courses Taught:

*CS122 An Introductory Bridge Course in Discrete Math.*

*CS201 Discrete Algorithmic Mathematics.*

*CS301 Foundations of Computer Science.*

*CS420 Formal languages and Automata (The Old Version).*

*CS420 Introduction to Algorithms (The New Version).*

*CS520 Complexity and Analysis of Algorithms.*

*CS555 Database Systems.*

## Classes Taught in the Last Five Years

*CS640 Topics in Artificial Intelligence.*

*CS122 An Introductory Bridge Course in Discrete Math.*

## Masters Students (\* Co-Advisor)

1987 Keith Blackwell  
1988 Morris, C.  
1988 Kim Conrad  
1988 Davidson, H. (1 coauthored paper)  
1988 Joan Kauth (1 coauthored paper)  
1989 H. Dutta  
1989 D. Fuquay (3 coauthored papers)  
1989 Tim Starkweather (2 coauthored papers)  
1989 Jane Chen  
1990 Dena Eber  
1990 V. Balasubramanian  
1991 Kelly, K.  
1991 Chris Bogart (2 coauthored papers)  
1991 A. Kusuma (1 coauthored paper)  
1991 K. Mathias (3 coauthored papers)  
1991 J. Applin  
1992 Larry Adams\*  
1992 Vijay Anisetti  
1993 David Boll  
1993 A.R. Gingras  
1993 Lance Forbes\*  
1994 John Dzuber (2 coauthored papers)  
1995 Soraya Rana (3 coauthored papers)  
1995 Ron Cogswell (1 coauthored paper)  
1997 Evan Bynum  
1999 Laura Barbulescu (3 coauthored papers)  
1999 Jean-Paul Watson (4 coauthored papers)  
2000 Manuel Vazquez (3 coauthored papers)  
2004 Monte Lunacek (2 coauthored papers)  
2006 Mark Richards (2 coauthored papers)  
2008 A. Sutton (6 coauthored papers)  
2011 Doug Hains (3 coauthored papers)

## PhD Students (\*Co-Advised)

1992 N. Karunanithi.	(8 coauthored papers)	Belcore
1993 T. Starkweather	(11 total coauthored papers)	Consultant
1994 S. Gordon	(4 coauthored papers)	Faculty, Sonoma State U.
1994 K. Mathias	(21 total coauthored papers)	Northrup Grumman
1998 R. Das	(7 coauthored papers)	IBM/T.J. Watson
1999 S. Rana	(18 total coauthored papers)	BBN Research Labs
1999 R. Heckendorn	(10 total coauthored papers)	Faculty, Univ. Idaho
2000 C. Guerra*	(6 coauthored papers)	Faculty, Minn. State
2003 J.P. Watson*	(18 coauthored papers)	Sandia National Labs
2005 L. Barbulescu*	(17 coauthored papers)	CMU, Research Scientist
2008 M. Lunacek	(11 coauthored papers)	NCAR, Boulder
2010 R. Dewri*	(18 coauthored papers)	Faculty, CU Denver
2010 A. Sutton*	(14 coauthorer papers)	Postdoc, Adelaid