Curriculum Vitae – Gary B. Parker
April 2013

General Information

Address:	Department of Computer Science
	Connecticut College
	New London, Connecticut, 06320
Phone:	(860) 439-5208
Email:	parker@conncoll.edu
Citizenship:	U.S.A.

Education

Ph.D., Indiana University, 1999, Computer Science and Cognitive Science

M.S. with distinction, Naval Postgraduate School, 1992, Computer Science

B.A., University of Washington, 1976, Zoology

Professional Experience

Professor at Connecticut College, New London, Connecticut (1999 – present)
    Professor of Computer Science (2012 – present)
    Associate Professor of Computer Science (2005 – 2012)
    Assistant Professor of Computer Science (1999 - 2005)
    Department of Computer Science, Chair (2009 – present)
    Department of Math and Computer Science, CS Program Director (1999 – 2009)

Computer Specialist / Programmer / Analyst (1994)
    Transportation Engineering Agency
    Department of the Army, Newport News, Virginia

Adjunct Instructor (1994)
    Department of Computer Science
    The College of William & Mary, Williamsburg, Virginia

United States Naval Officer (1976 - 1993)
    Lieutenant Commander, Pilot
    United States Navy

Undergraduate Student Research (in past 10 years)

Advisor for 8 year-long honors studies and 104 one-semester independent studies

Advisor for 43 eight-week and 8 shorter duration summer research sessions

Published 41 refereed papers coauthored with students; 19 of these were presented by the student at conferences in locations such as Japan, Australia, Spain, Scotland, Alaska, Hawaii.

Refereed Publications (* student or prior student co-authors)

1. Parker, G. and R. Zbeda* (2012). Learning Area Coverage for a Self-Sufficient Hexapod Robot Using a Cyclic Genetic Algorithm. Accepted for publication in the *IEEE Systems Journal*.

2. Alpert, D.T.* and G. Parker (2012). A Cyclic Genetic Algorithm to Model Use Patterns in an Intelligent Environment. *International Transactions on Systems Science and Applications*, Volume 8, December 2012, pp. 85-98.

3. Parker, G. and S. Penrose* (2012). Learning Control for an Xpilot-AI Agent Playing Capture the Flag. *Proceedings of the 2012 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2012).* October 2012, Seoul, Korea.

4. Parker, G. and B. Gulcu* (2012). Evolving Predator Control Programs for an Actual Hexapod Robot Predator. *Proceedings of the 2012 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2012).* October 2012, Seoul, Korea.

5. Parker, G. and D. T. Alpert* (2012). Automation Techniques for Intelligent Environments -- Prediction of Building Activity Patterns Using a Cyclic Genetic Algorithm. *Proceedings of the 2012 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2012).* October 2012, Seoul, Korea.

6. Parker, G. and P. Fritzsche* (2011). Investigating the Effects of Learning Speeds on Xpilot Agent Evolution. *Proceedings of the 2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2011).* October 2011, Anchorage, Alaska, USA.

7. Parker, G. and J. O'Connor* (2011). Fitness Biasing for the Box Pushing Task. *Proceedings of the 2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2011).* October 2011, Anchorage, Alaska, USA.

8. Parker, G. and W. Tarimo* (2011). Using Cyclic Genetic Algorithms to Learn Gaits for an Actual Quadruped Robot. *Proceedings of the 2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2011).* October 2011, Anchorage, Alaska, USA.

9. Parker, G. and P. Fritzsche* (2011). Fitness Biasing for Evolving an Xpilot Combat Agent. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011).* June 2011, New Orleans, Louisiana, USA.

10. Parker, G., Tarimo, W.*, and M. Cantor* (2011). Quadruped Gait Learning Using Cyclic Genetic Algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011).* June 2011, New Orleans, Louisiana, USA.

11. Parker, G. and W. Tarimo* (2011). The Effects of Using a Greedy Factor in Hexapod Gait Learning. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011).* June 2011, New Orleans, Louisiana, USA.

12. Graham, L., Borbone, J.*, and G. Parker (2011). Comparison of a Greedy Selection Operator to Tournament Selection and a Hill Climber. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation (CEC 2011).* June 2011, New Orleans, Louisiana, USA.

13. Parker, G. and J. Borbone* (2010). Wing and Gliding Dynamics of a Flapping Winged Ornithopter. *Proceedings of the 2010 World Automation Congress International Symposium on Intelligent Automation and Control (ISIAC 2010).* September 2010, Kobe, Japan.

14. Hubley, A.* and G. Parker (2010). Using a Fuzzy Logic Control System for an Xpilot Combat Agent. *Proceedings of the 2010 World Automation Congress International Symposium on Intelligent Automation and Control (ISIAC 2010).* September 2010, Kobe, Japan.

15. Parker, G. and D. Arroyo* (2010). The Xpilot-AI Environment. *Proceedings of the 2010 World Automation Congress International Symposium on Intelligent Automation and Control (ISIAC 2010).* September 2010, Kobe, Japan.

16. Allen, M., Dirmaier, K.*, and G. Parker (2010). Real-Time AI in Xpilot Using Reinforcement Learning. *Proceedings of the 2010 World Automation Congress International Symposium on Intelligent Automation and Control (ISIAC 2010).* September 2010, Kobe, Japan.

17. Parker, G. and P. Nathan* (2010). Concurrently Evolving Sensor Morphology and Control for a Hexapod Robot. *Proceedings of the 2010 IEEE Congress on Evolutionary Computation (CEC 2010).* July 2010, Barcelona, Spain.

18. Parker, G. and M. Probst* (2010). Using Evolutionary Strategies for the Real-Time Learning of Controllers for Autonomous Agents in Xpilot-AI. *Proceedings of the 2010 IEEE Congress on Evolutionary Computation (CEC 2010).* July 2010, Barcelona, Spain.

19. Morelli, R., Tucker, A., Danner, N., de Lanerolle, T., Ellis, H., Izmirli, O., Krizanc, D., and G. Parker (2009). Revitalizing Computing Education by Building Free and Open Source Software for Humanity. *Communications of the ACM (Association for Computing Machinery)*, 52(8), 67-75. August 2009.

20. Parker, G. and R. Zbeda* (2009). Learning Area Coverage for a Self-Sufficient Colony Robot. *Proceedings of the 2009 IEEE Congress on Evolutionary Computation (CEC 2009).* May 2009, Trondheim, Norway.

21. Parker, G. (2009). Punctuated Anytime Learning to Evolve Robot Control for Area Coverage. *Design and Control of Intelligent Robotic Systems*, Chapter 13, pp. 255-276, edited by Dikai Liu, Lingfeng Wang, Kay Chen Tan, published by Springer, March 2009.

22. Parker, G. and B. Gulcu* (2008). Evolving Predator Control Programs for a Hexapod Robot Pursuing a Prey. *Proceedings of the 2008 World Automation Congress 7th*

International Symposium on Intelligent Automation and Control (ISIAC 2008).
September 2008, Waikoloa, Hawaii, USA

23. Parker, G. and P. Nathan* (2008). Response to Changes in Key Stimuli through the Co-Evolution of Sensor Morphology and Control. *Proceedings of the 2008 World Automation Congress 7th International Symposium on Intelligent Automation and Control (ISIAC 2008).* September 2008, Waikoloa, Hawaii, USA

24. Mclean, J.*, Parker, G., and N. Seal (2008). Basic Control for Four Rotor Autonomous Aerial Agent. *Proceedings of the 2008 World Automation Congress 12th International Symposium on Robotics and Applications (ISORA 2008).* September 2008, Waikoloa, Hawaii, USA

25. de Lanerolle T., Morelli R., Danner N., Krizanc D., Parker G., and O. Izmirli (2008). Creating an Academic Community to Build Humanitarian FOSS: A Progress Report. *Proceedings of the 5th International ISCRAM Conference,* May 2008.

26. Parker, G. and R. Zbeda* (2007). Learning Navigation for Recharging a Self-Sufficient Colony Robot. *Proceedings of the 2007 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2007).* October 2007, Montreal, Quebec, Canada.

27. Parker, G. and G. Fedynyshyn* (2007). Enhancing Embodied Evolution with Punctuated Anytime Learning. *Proceedings of the 2007 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2007).* October 2007, Montreal, Quebec, Canada.

28. Parker, G. and P. Nathan* (2007). Co-Evolution of Sensor Morphology and Control on a Simulated Legged Robot. *Proceedings of the 7th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA 2007).* June 2007, Jacksonville, Florida.

29. Parker, G., Duzevik, D.*, Anev, A.*, and R. Georgescu* (2007). Morphological Evolution of Dynamic Structures in a 3-Dimensional Simulated Environment. *Proceedings of the 7th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA2007).* June 2007, Jacksonville, Florida.

30. Parker, G. and M. Parker (2007). Evolving Parameters for Xpilot Combat Agents. *The IEEE Symposium on Computational Intelligence and Games (CIG2007).* April 2007, Honolulu, Hawaii.

31. Parker, M. and G. Parker (2007). The Evolution of Multi-Layer Neural Networks for the Control of Xpilot Agents. *The IEEE Symposium on Computational Intelligence and Games (CIG2007).* April 2007, Honolulu, Hawaii.

32. Parker, M. and G. Parker (2007). The Core: Evolving Autonomous Agent Control. *The IEEE Symposium on Artificial Life (IEEE-ALife'07).* April 2007, Honolulu, Hawaii.

33. Parker, G. and P. Nathan* (2006). Evolving Sensor Morphology on a Legged Robot in Niche Environments. *Proceedings of the World Automation Congress (WAC 2006).* July 2006, Budapest, Hungary.

34. Parker, G. and O. Izmirli (2006). Choosing a Charging Station Using Sound in Colony Robotics. *Proceedings of the World Automation Congress (WAC 2006).* July 2006, Budapest, Hungary.

35. Blumenthal, H.* and G. Parker (2006). Benchmarking Punctuated Anytime Learning for Evolving a Multi-Agent Team's Binary Controllers. *Proceedings of the World Automation Congress (WAC 2006).* July 2006, Budapest, Hungary.

36. Parker, G. and M. Parker (2006). The Incremental Evolution of Attack Agents in Xpilot. *Proceedings of the 2006 Congress on Evolutionary Computation (CEC 2006).* July 2006, Vancouver, BC, Canada.

37. Parker, G., Doherty, T.*, and M. Parker (2006). Generation of Unconstrained Looping Programs for Control of Xpilot Agents. *Proceedings of the 2006 Congress on Evolutionary Computation (CEC 2006).* July 2006, Vancouver, BC, Canada.

38. Parker, M. and G. Parker (2006). Learning Control for Xpilot Agents in the Core. *Proceedings of the 2006 Congress on Evolutionary Computation (CEC 2006).* July 2006, Vancouver, BC, Canada.

39. Parker, M. and G. Parker (2006). Using a Queue Genetic Algorithm to Evolve Xpilot Control Strategies on a Distributed System. *Proceedings of the 2006 Congress on Evolutionary Computation (CEC 2006).* July 2006, Vancouver, BC, Canada.

40. Parker, G. and I. Parashkevov* (2005). Cyclic Genetic Algorithm with Conditional Branching in a Predator-Prey Scenario. *Proceedings of the 2005 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2005).* October 2005, Waikoloa, Hawaii.

41. Parker, G. and R. Zbeda* (2005). Controlled Use of a Robot Colony Power Supply. *Proceedings of the 2005 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2005).* October 2005, Waikoloa, Hawaii.

42. Parker, G., Doherty, T.*, and M. Parker (2005). Evolution and Prioritization of Survival Strategies for a Simulated Robot in Xpilot. *Proceedings of the 2005 IEEE Congress on Evolutionary Computation (CEC 2005).* September 2005, Edinburgh, UK.

43. Parker, G., Parker, M., and S. Johnson (2005). Evolving Autonomous Agent Control in the Xpilot Environment. *Proceedings of the 2005 IEEE Congress on Evolutionary Computation (CEC 2005).* September 2005, Edinburgh, UK.

44. Parker, G. and R. Georgescu* (2005). Using Cyclic Genetic Algorithms to Evolve Multi-Loop Control Programs. *Proceedings of the 2005 IEEE International Conference on Mechatronics and Automation (ICMA 2005).* July 2005, Niagara Falls, Ontario, Canada.

45. Parker, G. and R. Georgescu* (2005). Evolution of Multi-Loop Controllers for Fixed Morphology with a Cyclic Genetic Algorithm. *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO 2005).* June 2005, Washington, DC.

46. Parker, G. (2005). Evolving Gaits for Hexapod Robots Using Cyclic Genetic Algorithms. *International Journal of General Systems*, Volume 34, Number 3, June 2005, pp. 301-315.

47. Blumenthal, H.* and G. Parker (2004). Co-Evolving Team Capture Strategies for Dissimilar Robots. *Proceedings of the AAAI 2004 Symposium on Artificial Multiagent Learning.* October 2004, Washington, DC.

48. Parker, G. (2004). Fitness Biasing to Produce Adaptive Gaits for Hexapod Robots. *Proceedings of the 2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2004).* September 2004, Sendai, Japan.

49. Parker, G. and H. Blumenthal* (2004). Competing Sample Sizes for the Co-Evolution of Heterogeneous Agents. *Proceedings of the 2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2004).* September 2004, Sendai, Japan.

50. Parker, G. (2004). Partial Recombination for the Co-Evolution of Model Parameters. *Proceedings of the Congress on Evolutionary Computation (CEC 2004).*

51. Parker, G. and H. Blumenthal* (2004). Varying Sample Sizes for the Co-Evolution of Heterogeneous Agents. *Proceedings of the Congress on Evolutionary Computation (CEC 2004).*

52. Blumenthal, H.* and G. Parker (2004). Punctuated Anytime Learning for Evolving Multi-Agent Capture Strategies. *Proceedings of the Congress on Evolutionary Computation (CEC 2004).*

53. Parker, G., Parashkevov, I.*, Blumenthal, H.*, and T. Guildman* (2004). Cyclic Genetic Algorithms for Evolving Multi-Loop Control Programs. *Proceedings of the World Automation Congress (WAC 2004).*

54. Parker, G., Georgescu, R.*, and K. Northcutt (2004). Continuous Power Supply for a Robot Colony. *Proceedings of the World Automation Congress (WAC 2004).*

55. Parker, G. and H. Blumenthal* (2003). Comparison of Sampling Sizes for the Co-Evolution of Cooperative Agents. *Proceedings of the 2003 Congress on Evolutionary Computation (CEC 2003).*

56. Parker, G., Anev A.*, and D. Duzevik* (2003). Evolving Towers in a 3-Dimensional Simulated Environment. *Proceedings of the 2003 Congress on Evolutionary Computation (CEC 2003).*

57. Parker, G. and Z. Li* (2003). Evolving Neural Networks for Hexapod Leg Controllers. *Proceedings of the 2003 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2003).*

58. Parker, G. (2003). Learning Adaptive Leg Cycles Using Fitness Biasing. *Proceedings of the 2003 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2003).*

59. Toth, D.* and G. Parker (2003). Evolving Gaits for the Lynxmotion Hexapod II Robot. *Proceedings of the 7th World Multiconference on Systems, Cybernetics and Informatics (SCI 2003), Volume III.*

60. Parker, G. and H. Blumenthal* (2002). Sampling the Nature of a Population: Punctuated Anytime Learning for Co-Evolving a Team. *Smart Engineering System Design: Neural Networks, Fuzzy Logic, Evolutionary Programming, Data Mining, and Complex Systems (ANNIE 2002).*

61. Parker, G. (2002). Punctuated Anytime Learning for Hexapod Gait Generation. *Proceedings of the 2002 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2002).*

62. Parker, G. (2002). Learning Area Coverage Using the Co-Evolution of Model Parameters. *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO 2002).*

63. Parker, G. and Z. Li* (2002). Evolving Neural Network Controllers to Produce Leg Cycles for Gait Generation. *Proceedings of the World Automation Congress (WAC2002), Volume 14, Robotics, Manufacturing, Automation and Control.*

64. Parker, G and H. Blumenthal* (2002). Punctuated Anytime Learning for Evolving a Team. *Proceedings of the World Automation Congress (WAC2002), Volume 14, Robotics, Manufacturing, Automation and Control.*

65. Parker, G. (2001). Evolving Cyclic Control for a Hexapod Robot Performing Area Coverage. *Proceedings of 2001 IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA 2001).*

66. Parker, G. (2001). The Incremental Evolution of Gaits for Hexapod Robots. *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO 2001).*

67. Larochelle, K.*, Dashnaw, S.*, and G. Parker (2001). Gait Evolution for a Hexapod Robot. *Proceedings of the Fourth International Symposium on Soft Computing and Intelligent Systems for Industry (SOCO / ISFI 2001).*

68. Parker, G. (2001). Learning Control Cycles for Area Coverage with Cyclic Genetic Algorithms. *Advances in Fuzzy Systems and Evolutionary Computation. Proceedings of the 2nd WSES International Conference on Evolutionary Computation (EC '01).*

69. Parker, G. (2000). Co-Evolving Model Parameters for Anytime Learning in Evolutionary Robotics. *Robotics and Autonomous Systems*, Volume 33, Issue 1, 31 Oct. 2000, pp. 13-30.

70. Parker, G. (2000). Evolving Leg Cycles to Produce Hexapod Gaits. *Proceedings of the World Automation Congress (WAC 2000), Volume 8, Robotic and Manufacturing Systems.*

71. Parker, G. and K. Larochelle* (2000). Punctuated Anytime Learning for Evolutionary Robotics. *Proceedings of the World Automation Congress (WAC 2000), Volume 8, Robotic and Manufacturing Systems.*

72. Parker G. (1999). The Co-Evolution of Model Parameters and Control Programs in Evolutionary Robotics. *Proceedings of the 1999 IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA'99).*

73. Parker, G. and J. Mills (1999). Adaptive Hexapod Gait Control Using Anytime Learning with Fitness Biasing. *GECCO-99: Proceedings of the Genetic and Evolutionary Computation Conference.*

74. Parker, G. (1998). Generating Arachnid Robot Gaits with Cyclic Genetic Algorithms. *Genetic Programming 1998: Proceedings of the Third Annual Conference.*

75. Parker, G. and I. Cyliax (1998). Locomotion Control Cycles Adapted for Disabilities in Hexapod Robots. *Proceedings of the World Automation Congress (WAC '98), Volume 7, Robotic and Manufacturing Systems.*

76. Parker, G. and J. Mills (1998). Metachronal Wave Gait Generation for Hexapod Robots. *Proceedings of the World Automation Congress (WAC '98), Volume 7, Robotic and Manufacturing Systems.*

77. Parker, G., Braun, D., and I. Cyliax (1997). Evolving Hexapod Gaits Using a Cyclic Genetic Algorithm. *Proceedings of the IASTED International Conference on Artificial Intelligence and Soft Computing (ASC '97).*

78. Parker, G., Braun, D., and I. Cyliax (1997). Learning Gaits for the Stiquito. *Proceedings of the 8th International Conference on Advanced Robotics (ICAR '97).*

79. Parker, G., and G. Rawlins (1996). Cyclic Genetic Algorithms for the Locomotion of Hexapod Robots. *Proceedings of the World Automation Congress (WAC '96), Volume 3, Robotic and Manufacturing Systems.*

80. Shing, M., and G. Parker (1993). Genetic Algorithms for the Development of Real-Time Multi-Heuristic Search Strategies. *Proceedings of the Fifth International Conference on Genetic Algorithms (ICGA '93).*

Other Publications

1. Piatetsky-Shapiro, G and G. Parker (2006). Data Mining, Version 2. Volume 7 of *Modules in Emerging Fields* (Marc Zimmer, Connecticut College). Educational CD-ROM, 2006.

2. Piatetsky-Shapiro, G and G. Parker (2005). Data Mining. Volume 7 of *Modules in Emerging Fields* (Marc Zimmer, Connecticut College). Educational CD-ROM, 2005.

3. Johnson, S., Parker, G., Cyliax I., and D. Braun (1997). Using Cyclic Genetic Algorithms to Reconfigure Hardware Controllers for Robots. Indiana University Computer Science Department Technical Report No. 494, October 1997.

Invited Presentations

Cyclic Genetic Algorithms, Punctuated Anytime Learning, and Xpilot-AI
Lifetime Achievement Award Plenary Talk
World Automation Congress (WAC 2008)
September 2008. Waikoloa, Hawaii.

Hexapods Learning to Walk
Event for the Reunion 2007
Connecticut College
June 2007. New London, Connecticut.

Evolutionary Computation for Learning Robot Control
Naval Postgraduate School
September 2005. Monterey, California.

Evolutionary Robotics, Cyclic Control, and Colony Agent Learning
Naval Postgraduate School
September 2005. Monterey, California.

Robotics at Connecticut College
Event for the Presidential Inauguration of Norman Fainstein
Connecticut College
May 2002. New London, Connecticut.

Learning Cyclic Control Programs for Hexapod Robots
The Endowed Chair Lecture Series
Connecticut College
February 2000. New London, Connecticut.

Evolving Gaits for Hexapod Robots Using Cyclic Genetic Algorithms
Michigan Technological University
December 1998. Houghton, Michigan.

Evolutionary Robotics and the Adaptive Systems Lab
Northern Michigan University
December 1998. Marquette, Michigan.

Evolving Gaits for Hexapod Robots Using Cyclic Genetic Algorithms
Northern Michigan University
December 1998. Marquette, Michigan.

Legged Robot Control Using Cyclic Genetic Algorithms
International Conference on Intelligent Systems and Semiotics (ISAS '97)
September 1997. Gaithersburg, Maryland.

The Stiquito, Cyclic Genetic Algorithms, and IU Robotics
Naval Postgraduate School
July 1997. Monterey, California.

Grants and Awards

DoD / Stevens Institute of Technology Grant/Contract to develop an autonomous sailboat.
May-June 2012.
Principal Investigator. $14,987.

CPATH-2: Collaborative Research: Building a Community to Incorporate Humanitarian Free and Open Source Software into Undergraduate Computing Education
National Science Foundation CCF-0939002, 1 Sep 2009 - 31 Aug 2011.
Co-Principal Investigator. $174,494

REU supplement award for the NSF CPATH grant (CCF-0722199), Humanitarian Free and Open Source Software.
National Science Foundation, 15 May 2009 - 31 Aug 2009.
Principal Investigator. $5500

World Automation Congress / AutoSoft Lifetime Achievement Award.
8th Biannual World Automation Congress, Waikoloa, Hawaii, 30 September 2008.

CPATH CB: Collaborative: Can Humanitarian Open-Source Software Development Help Revitalize Undergraduate Computing Education?
National Science Foundation CCF-0722199, 1 Sep 2007 - 31 Aug 2009.
Principal Investigator. $70,421

CTW CS Mellon Foundation Grant. Connecticut College, Trinity, Wesleyan Consortium in Computer Sciences (2005-2009).
The Andrew W. Mellon Foundation.
Grant Administrator. $800,000

Extended Keck/Hughes Visiting Fellows Modules in Data Mining Grant
Connecticut College, 2006

NSF Math and Computer Science Scholarship Program
National Science Foundation DUE-0123078, 2002-2006
Principal Investigator. $385,000

The W. M. Keck-Howard Hughes Medical Institute Visiting Fellows Modules
in Emerging Fields Program Grant
Modules in Data Mining
Connecticut College, 2003

SOCO/ISFI 2001 Best Paper Presented on 29 June 2001 Award
Gait Evolution for a Hexapod Robot

Named the Jean C. Tempel '65 Assistant Professor in Computer Science
Connecticut College, 2000

WAC '98 Best Paper Award for ISORA '98, 1998
Locomotion Control Cycles Adapted for Disabilities in Hexapod Robots

Graduate Traineeship in Robotics and Intelligent Control, 1994 - 1999
National Science Foundation, $21,000 per year

Rear Admiral Grace Murray Hopper Award, United States Navy, 1992

Navy Commendation Medal, United States Navy, 1990

Professional Activities

Chairmanships

SMC 2012 Session on Soft Computing (Co-Chair)
SMC 2011 Session on Evolving Intelligent Systems (Chair)
IEEE Congress on Evolutionary Computation (CEC 2011) (Special Sessions Co-Chair)
CEC 2011 Special Session on Autonomous Agent Learning (Co-Organizer and Chair)
CEC 2011 Special Session on Greedy Selection in Evolutionary Computation (Co-Organizer and Co-Chair)
8th International Symposium on Intelligent Automation and Control (ISIAC 2010) (Chair)
WCCI 2010 Session on Computational Intelligence for Learning Morphology and Control (Co-Organizer and Co-Chair)
CEC 2010 Session on Evolutionary Games and Multi-Agent Systems (Chair)
IEEE Congress on Evolutionary Computation (CEC 2010) (Special Sessions Co-Chair)
7th International Symposium on Intelligent Automation and Control (ISIAC 2008) (Chair)
12th International Symposium on Robotics and Applications (ISORA 2008) (Co-Chair)
SMC 2007 Session on Control of Uncertain Systems (Chair)
CIRA 2007 Session on Mobile Robots (Chair)
Xpilot-AI Competition for CIG 2007 (Co-Organizer and Chair)
11th International Symposium on Robotics and Applications (ISORA 2006) (Co-Chair)
SMC 2005 Session on Energy for Dynamic Systems (Chair)
SMC 2005 Session on Multi-Agent Systems (Co-Chair)
SMC 2005 Session on Robot Learning (Co-Chair)
ICMA 2005 Session on Control (Co-Chair)
ICMA 2005 Session on Modeling and Simulation (Co-Chair)
IROS 2004 Session on Collective Robotic Systems (Co-Chair)
CEC 2004 Session on Evolutionary Intelligent Agents (Chair)
WAC 2004 Session on Multiple Robots and Cooperation (Chair)
CEC 2003 Session on Evolutionary Design and Evolvable Hardware (Chair)
IROS 2003 Session on Biologically Inspired Robots (Chair)
SCI 2003 Session on Intelligent Robots II (Chair)
WAC 2002 Session on Robot Control (Chair)
SOCO/ISFI 2001 Session on Neural Networks II (Chair)
WSES EC 2001 Session One on Evolutionary Computation (Chair)

WAC 2000 Session on Evolutionary Robotics (Organizer and Chair)

CIRA'99 Session on Multi-Legged Robots (Chair)

GECCO '99 Session on Robotics (Chair)

WAC '98 Session on Learning Cyclic Control/Behavior in Robots (Organizer and Chair)

WAC '98 Session on Walking Robots (Co-Chair)

Board of Associate Editors

IEEE Systems Journal

AutoSoft, International Journal on Intelligent Automation and Soft Computing

Reviewer for Journals

Bioinspiration & Biomimetics

International Journal of Bio-Inspired Computation

IEEE Transactions on Evolutionary Computation

BioSystems Journal

Genetic Programming and Evolvable Machines

International Journal of Modeling and Simulation

IEEE Systems Journal

IEEE Transactions on Robotics

IEEE Transactions on Systems, Man and Cybernetics- Part B

Robotics and Autonomous Systems

AutoSoft, International Journal on Intelligent Automation and Soft Computing

IEEE Transitions on Robotics and Automation

International Journal of Smart Engineering System Design

Journal of Robotic Systems

Conference Program Committee / Reviewer

International Conf. on Evolutionary Computation Theory and Applications (ECTA 2013)

2013 IEEE Symposium Series on Computational Intelligence (SSCI 2013)

2012 IEEE Conference on Computational Intelligence and Games (CIG 2012)

International Conf. on Evolutionary Computation Theory and Applications (ECTA 2012)

34th Annual Meeting of the Cognitive Science Society (CogSci 2012)

World Automation Congress 2012 (WAC 2012)

The 2012 IEEE World Congress on Computational Intelligence (WCCI 2012)

2011 IEEE Conference on Computational Intelligence and Games (CIG 2011)

International Conf. on Evolutionary Computation Theory and Applications (ECTA 2011)

2011 IEEE Congress on Evolutionary Computation (CEC 2011)

2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2011)

33rd Annual Meeting of the Cognitive Science Society (CogSci 2011)

IEEE Workshop on Robotic Intelligence in Informationally Structured Space (RiiSS 2011)

2011 IEEE Symposium on Computational Intelligence and Data Mining (CIDM 2011)
International Conference on Evolutionary Computation (ICEC 2010)
2010 IEEE Conference on Computational Intelligence and Games (CIG 2010)
2010 IEEE Congress on Evolutionary Computation (CEC 2010)
IEEE International Symposium on Computational Intelligence and Games (CIG 2009)
International Conference on Evolutionary Computation (ICEC 2009)
IEEE International Conference on Automation and Logistics (ICAL 2009)
IEEE Int. Sym. on Computational Intelligence in Data Mining (CIDM 2009)
2008 IEEE Symposium on Computational Intelligence and Games (CIG 2008)
30th Annual Meeting of the Cognitive Science Society (CogSci 2008)
2008 IEEE World Congress on Computational Intelligence (WCCI 2008)
5th Int. Conf. on Info. Systems for Crisis Response and Management (ISCRAM 2008)
2007 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2007)
The 2007 Congress on Evolutionary Computation (CEC 2007)
7th IEEE Int. Sym. Computational Intelligence in Robotics and Automation (CIRA2007)
Smart Engineering System Design: Neural Networks, Fuzzy Logic, Evolutionary
Programming, Complex Systems and Artificial Life (ANNIE 2007)
2006 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2006)
Genetic and Evolutionary Computation Conference (GECCO 2006)
Twenty-Eighth Annual Conference of the Cognitive Science Society (CogSci 2006)
2006 Congress on Evolutionary Computation (CEC 2006)
11th International Symposium on Robotics and Applications (ISORA 2006)
IEEE SMC International Conference on System of Systems Engineering (SoSE 2006)
2005 International Conf. on Computing, Communications and Control Technologies
2005 Congress on Evolutionary Computation (CEC 2005)
A-Life, Evolutionary Robotics and Adaptive Behavior track for GECCO 2005
2005 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2005)
2004 International Conf. on Computing, Communications and Control Technologies
2004 Congress on Evolutionary Computation (CEC-2004)
2003 Conference on Smart Engineering System Design (ANNIE 2003)
2003 Evolutionary Robotics Track for GECCO
2003 Congress on Evolutionary Computation (CEC 2003)
2002 Evolutionary Robotics Track for GECCO
2002 World Congress on Computational Intelligence (WCCI '02)
2000 Genetic and Evolutionary Computation Conference (GECCO 2000)
1999 Genetic and Evolutionary Computation Conference (GECCO '99)

Memberships

The Institute of Electrical and Electronics Engineers (IEEE)
IEEE Computer Society
IEEE Computational Intelligence Society (CIS)
IEEE Systems, Man, and Cybernetics Society (SMC)
Association for Computing Machinery (ACM)
ACM Special Interest Group for Genetic and Evolutionary Computation (SIGEVO)
American Association for Artificial Intelligence (AAAI)
Cognitive Science Society
IEEE Intelligent Robotics Task Force
IEEE CIS Interchange Standards for Game Agents Task Force
IEEE Task Force on Computational Intelligence in Video Games