

CURRICULUM VITAE

Garrison W. Greenwood

April 27, 2025

Education

Ph.D in Electrical Engineering, University of Washington (1992)

Professional Registration

Registered Professional Engineer in State of California (No. 10279)

Industrial Employment

1. Senior Software Engineer	Space Labs Medical, Inc. (Redmond, WA)	1992–1993
2. Senior Engineer	VOICE Computer Corp. (Redmond, WA)	1990–1992
3. Principle Engineer	Sundstrand Data Control (Redmond, WA)	1987–1990
4. Senior Engineer	Eldec Corp. (Lynnwood, WA)	1986–1987
5. Senior Engineer	Honeywell Corporation (Mukelteo, WA)	1982–1986
6. Senior Engineer	Boeing Corporation (Seattle, WA)	1981–1982
7. Senior Engineer	Naval Weapons Station (Seal Branch, CA)	1976–1981

Academic Employment

1. Portland State University	2000–present
2. Western Michigan University	1993–2000
3. University of Washington (Seattle, WA) [†]	1990–1993
4. Seattle University (Seattle, WA) [†]	1989
5. Cogswell College North [†]	1982–1989
6. California State University at Fullerton (Fullerton, CA) [†]	1978–1979
7. California State Polytechnic University (Pomona, CA) [†]	1977

[†]Adjunct faculty position

Publications

• Books

1. Garrison W. Greenwood, *On the Study of Human Cooperation via Computer Simulation: Why Existing Computer Models Fail to Tell Us Much of Anything*, Morgan & Claypool Publishers, 2019
2. *Advances in Computational Intelligence*, IEEE World Congress on Computational Intelligence WCCI 2012, J. Liu, C. Alippi, B. Bouchon-Meunier, G. Greenwood and H. Abbass (Eds.), LNCS 7311, Springer, 2012
3. Garrison W. Greenwood and Andrew M. Tyrrell, *Introduction to Evolvable Hardware: A Practical Guide for Designing Self-Adaptive Systems*, Wiley-IEEE Press, 2006

• Journal Papers

1. G. Greenwood and D. Ashlock, “A representation for many player generalized divide the dollar games”, *Games* 14(2): 19, 2023
2. G. Greenwood and D. Ashlock, “A comparison of the Moran process and replicator equations for solving social dilemma game strategies”, *BioSystems* 202: 104352, 2021

3. D. Constantine, R. Tymerski and G. Greenwood, "Differential evolution optimization of the broken wing butterfly option strategy" *Technology and Investment* 11:23–45, 2020
4. G. Greenwood and H. Abbass and E. Petraki, "When is altruistic punishment useful in social dilemmas?", *BioSystems* 174:60–62, 2018
5. R. Tymerski and G. Greenwood, "Designing equity option strategies using memetic algorithms" *Technology and Investment* 9:179–202, 2018
6. M. Podhradsky and G. Greenwood, "An evolutionary approach to tuning a multi-agent system for autonomous adaptive control of a flapping-wing micro air vehicle", *Int'l. J. Robotics and Auto. Tech.* 3:7–15, 2016
7. H. Abbass, G. Greenwood and E. Petraki, "The N-player trust game and its replicator dynamics", *IEEE Trans. on Evol. Comput.* 20(3):470–474, 2016
8. G. Greenwood, "Evolution of strategies for the collective-risk social dilemma relating to climate change", *EuroPhys. Ltrs*, 95:40006, 2011
9. M. Falconer, G. Greenwood, D. Morgan, K. Kamisetty, A. Norman and K. Ganguly, "Using evolutionary algorithms for signal integrity assessment of high-speed data buses", *J. Elec. Testing: Theory & Appl.* 26:297–305, 2010
10. G. Greenwood, "Using differential evolution for a subclass of graph theory problems", *IEEE Trans. on Evol. Comput.* 13(5), 1190–1192, 2009
11. S. Hutsell and G. Greenwood, "Efficient algebraic representation of quantum circuits", *J. of Discrete Math. Sci. & Crypto.* 12(4), 429–449, 2009
12. G. Greenwood, "Why operator-induced neighborhoods are a bad idea", *J. of Interdisc. Math.* 12(4): 451–455, 2009
13. G. Greenwood, "Teaching hardware description languages to satisfy industry expectations", *Int'l J. of Elec. Engr. Ed.* 46(3): 239–247, 2009
14. G. Quan, G. Greenwood and X. Hu, "Searching for multiobjective preventive maintenance schedules: combining preferences with evolutionary algorithms", *European J. of Oper. Res.* Vol. 177, Issue 3, 1969–1984, 2007
15. G. Greenwood, "Density in accessibility digraphs", *Graph Theory Notes of New York* XLIX, 7–10, 2005
16. G. W. Greenwood, "On the Practicality of Using Intrinsic Reconfiguration for Fault Recovery", *IEEE Transactions on Evolutionary Computation* Vol. 9, No. 4, 398–405, 2005
17. G. Greenwood, "On the Usefulness of Accessibility Graphs with Combinatorial Optimization Problems", *J. Interdiscip. Mathematics* Vol. 8, No. 2, 277–286, 2005
18. G. Greenwood, "Intrinsic Evolution of Safe Control Strategies for Autonomous Spacecraft", *IEEE Transactions on Aerospace & Electronic Systems* Vol. 40, No. 1, 236–246, 2004
19. G. Greenwood and Q. Zhu, "Convergence in Evolutionary Programs with Self-Adaptation", *Evolutionary Computation* Vol. 9, No. 2, 147–158, 2001
20. S. Ahire, G. Greenwood, A. Gupta and M. Terwilliger, "Workforce-constrained preventive maintenance scheduling using evolution strategies", *Decision Sciences Journal* Vol. 31, No. 4, 833–859, 2000
21. G. Greenwood, "Revisiting the complexity of finding globally minimum energy configurations in atomic clusters", *Zeitschrift für Physikalische Chemie*, Vol. 211, 105–114, 1999
22. G. Greenwood and X. Hu, "On the use of random walks to estimate correlation in fitness landscapes", *Computational Statistics & Data Analysis*, Vol 28, No. 2, 131–137, 1998
23. X. Hu and G. Greenwood, "An evolutionary approach to hardware/software partitioning", *IEE Proc. —Computers and Digital Techniques*, Vol. 145, No. 3, 203–209, 1998
24. G. Greenwood, "Efficient construction of self-avoiding walks for protein folding simulations on a torus", *Journal of Chemical Physics*, Vol. 108, No. 18, 7534–7537, 1998

25. G. Greenwood and X. Hu, "Are landscapes for constrained optimization problems statistically isotropic?", *Physica Scripta*, Vol. 57, 321–323, 1998
26. G. Greenwood, "Training multiple layer perceptrons to recognize attractors", *IEEE Transactions on Evolutionary Computation* Vol. 1, No. 4, 244–248, 1997
27. G. W. Greenwood, "Problems with conducting self-avoiding walks on n -cubes", *Graph Theory Notes of New York* 33, 44, 1997
28. G. Greenwood, "Characterization of attractors in speech signals", *BioSystems* 44(2), 161–165, 1997
29. G. Greenwood, "Chaotic behavior in evolution strategies", *Physica D* 109 (3-4), 343–350, 1997
30. G. Greenwood, "Training partially recurrent neural networks using evolutionary strategies," *IEEE Transactions on Speech & Audio Proc.*, Vol. 5, No. 2, 192–194, 1997
31. G. Greenwood, "So many algorithms. So little time.", *ACM Software Engineering Notes*, Vol. 22, No. 2, 92–93, 1997
32. A. Gupta and G. Greenwood, "Applications of evolutionary strategies to fine grained task scheduling," *Parallel Proc. Ltrs*, Vol. 6, No. 4, 551–561, 1996
33. A. Gupta and G. Greenwood, "Static task allocation using (μ, λ) evolutionary strategies," *Information Sciences*, Vol. 94, No. 1-4, 141–150, 1996
34. G. Greenwood, "On the equity of mutual exclusion algorithms in distributed systems," *Information Proc. Ltrs*, **56**, 19–22, 1995
35. G. Greenwood, "Designing bandpass IIR filters for use in biomedical applications," *Instrumentation Science & Technology*, Vol. 22, No. 4, 313–322, 1994
36. G. Greenwood, "Predicting the expansion cost of graph embeddings in n -cubes," *Graph Theory Notes of New York*, XXVII, 42–45, 1994

● Conference Papers

1. Garrison Greenwood, "Self-organization of wireless sensor networks for wildfire detection using Shapley values", 2025 17th Int'l. Conf. on Comp. & Automation Engr. (ICCAE), 2025
2. G. Greenwood, H. Abbass and A. Hussein, "Harmonizing individual and group interests: a strategy for fostering cooperation in social dilemma games", 2024 Int'l. Conf. on Emerging Tech. in Comp. Intell. (ICETCI), 80–87, 2024
3. G. Greenwood, H. Abbass and A. Hussein, "Interpretation of neural network players for a generalized divide the dollar game using SHAP values", 2023 IEEE Symp. Series Comput. Intell. (SSCI), 1808–1813, 2023
4. G. Greenwood and D. Ashlock, "Evolving neural networks for a generalized divide the dollar game", *Proc. 2022 IEEE Cong. on Evol. Comput.*, 1–8, 2022
5. G. Greenwood and D. Ashlock, "Monte carlo tree search strategies in 2-player iterated prisoner dilemma games", *Proc. 2020 IEEE Conf. on Games*, 163–169, 2020
6. G. Greenwood and D. Ashlock, "Monte carlo strategies for exploiting fairness in N-player ultimatum games", *Proc. 2019 IEEE Conf. on Games*, 89–95, 2019
7. G. Greenwood, H. Abbass and E. Petraki, "Punishing untrustworthiness and free riders to maintain cooperation in multi-agent social dilemmas using fuzzy logic", *Proc. 2019 Int'l. Conf. Computer & Automat. Engr. (ICCAE2019)*, 88–92, 2019
8. G. Greenwood, H. Abbass and E. Petraki, "A critical analysis of punishment in public goods games", *Proc. 2018 IEEE Conf. on Computational Intel. and Games*, 41–45, 2018
9. G. Greenwood and D. Ashlock, "On the evolution of fairness in N -player ultimatum games", *Proc. 2018 IEEE Congress on Evolutionary Computation*, 17–22, 2018
10. G. Greenwood, "A fuzzy system approach for choosing public goods game strategies", *Proc. 2017 IEEE Conf. on Computational Intel. and Games*, 104–109, 2017

11. G. Greenwood, H. Abbass, E. Petraki, "Emotion, trustworthiness and altruistic punishment in a tragedy of the commons social dilemma", *Proc. 2017 Australasian Conf. on Artificial Life and Comput. Intell., LNAI 10142*, 12–24, 2017
12. R. Tymerski and G. Greenwood, "Equity option strategy discovery and optimization using a memetic algorithm", *Proc. 2017 Australasian Conf. on Artificial Life and Comput. Intell., LNAI 10142*, 25–38, 2017
13. G. Greenwood, "Altruistic punishment can help resolve tragedy of the commons social dilemmas", *Proc. 2016 IEEE Conference on Computational Intelligence and Games*, 9–15, 2016
14. G. Greenwood, "On the use of spatial games in explaining human cooperation", *Proc. 2016 IEEE Congress on Evolutionary Computation*, 351–356, 2016
15. D. Ashlock and G. Greenwood, "Generalized divide the dollar", *Proc. 2016 IEEE Congress on Evolutionary Computation*, 343–350, 2016
16. J. Gallagher, M. Sam, S. Boddhu, E. Matson and G. Greenwood, "Drag force fault extension to evolutionary model consistency checking for a flapping-wing micro air vehicle", *Proc. 2016 IEEE Congress on Evolutionary Computation*, 3961–3968, 2016
17. G. Greenwood, H. Abbass, E. Petraki, "Finite population trust game replicators", *Proc. 2016 Australasian Conf. on Artificial Life and Comput. Intell., LNAI 9592*, 324–335, 2016
18. R. Tymerski, E. Ott and G. Greenwood, "Genetic algorithm based trading system design", *Proc. 2016 Australasian Conf. on Artificial Life and Comput. Intell., LNAI 9592*, 360–373, 2016
19. M. Podhradsky, G. Greenwood, J. Gallagher and E. Matson, "A multi-agent system for autonomous adaptive control of a flapping-wing micro air vehicle", *Proc. 2015 IEEE Int'l Conf. on Evol. Sys. (ICES 2015)*, 1073–1080, 2015
20. G. Greenwood, "Evolving strategies to help resolve tragedy of the commons social dilemmas", *Proc. 2015 IEEE Conference on Computational Intelligence and Games*, 383–390, 2015
21. G. Greenwood, "Emotions and their affect on cooperation levels in N -player social dilemmas", *Proc. 2015 Australasian Conf. on Artificial Life and Comput. Intell., LNAI 8955*, 88–99, 2015
22. J. Gallagher, E. Matson, G. Greenwood and S. Boddhu, "Improvements to evolutionary model consistency checking for a flapping-wing micro air vehicle", *Proc. IEEE Int'l Conf. on Evol. Sys.*, 211–218, 2014
23. Garrison W. Greenwood, John C. Gallagher and Eric T. Matson, "Cyber-physical systems: the next generation of evolvable hardware research and applications", *Proc. 18th Asia Pacific Symp. on Intel. & Evol. Sys.*, 285–296, 2014
24. G. Greenwood and Phillipa Avery, "Does the Moran process hinder our understanding of cooperation in human populations?", *Proc. 2014 IEEE Conference on Computational Intelligence and Games*, 1–6, 2014
25. Garrison Greenwood, Saber Elsayed, Ruhul Sarker and Hussein Abbass, "Online generation of trajectories for autonomous vehicles using a multi-agent system", *Proc. 2014 IEEE Congress on Evolutionary Computation*, 1218–1224, 2014
26. Ayman Ghoneim, Garrison W. Greenwood and Hussein Abbass, "Distributing cognitive resources in one-against-many strategy games", *Proc. 2013 IEEE Congress on Evolutionary Computation*, 1387–1394, 2013
27. G. Greenwood, "A tag-mediated game designed to study cooperation in human populations", *Proc. 2013 IEEE Conference on Computational Intelligence and Games*, 322–328, 2013
28. Garrison W. Greenwood and Subham Chopra, "A modified artificial bee colony algorithm for solving large graph theory problems", *Proc. 2013 IEEE Congress on Evolutionary Computation*, 713–717, 2013
29. Garrison W. Greenwood and Subham Chopra, "Using evolved controllers to adapt behavior in autonomous nonlinear systems", *Proc. 2013 IEEE Int'l Conf. on Evol. Sys.*, 1–8, 2013

30. John C. Gallagher, Eric T. Matson and Garrison W. Greenwood, "On the implications of plug-and-learn adaptive hardware components: toward a cyberphysical systems perspective on evolvable and adaptive hardware", *Proc. 2013 IEEE Int'l Conf. on Evol. Sys.*, 59–65, 2013
31. G. Greenwood and P. Avery, "Update rules, reciprocity and weak selection in evolutionary spatial games", *Proc. 2012 IEEE Conference on Computational Intelligence and Games*, 9–16, 2012
32. G. Greenwood and D. Ashlock, "Evolutionary games and the study of cooperation: why has so little progress been made?", *Proc. 2012 IEEE Congress on Evolutionary Computation*, 680–687, 2012
33. G. Greenwood, "Using discrete fourier transforms to detect operational environments for autonomous non-linear systems", *Proc. 2011 Asilomar Conf.*, 1552–1556, 2011
34. G. Greenwood, "Enhanced cooperation in the N -person iterated snowdrift game through tag mediation", *Proc. 2011 IEEE Conference on Computational Intelligence and Games*, 1–8, 2011
35. G. Greenwood, "On the value of operator-induced neighborhoods in fitness landscapes", *Proc. 2011 IEEE Congress on Evolutionary Computation*, 463–467, 2011
36. G. Greenwood and S. Chopra, "A numerical analysis of the evolutionary iterated snowdrift game", *Proc. 2011 IEEE Congress on Evolutionary Computation*, 2010–2016, 2011
37. G. Greenwood, "Evolving N -person social dilemma strategies to resolve questions on participation in climate change programs", *Proc. 2010 IEEE Conference on Computational Intelligence and Games*, 227–234, 2010
38. G. Greenwood and A. Tyrrell, "Metamorphic systems: a new model for adaptive system design", *Proc. 2010 IEEE Congress on Evolutionary Computation*, 3261–3268, 2010
39. G. Greenwood, S. Blakely, D. Scharfman, B. Calhoun, J. Keller, T. Ton, D. Wong and M. Soumekh, "Feature Extraction and object recognition in multi-modal forward looking imagery", *Proc. SPIE, Detection and Sensing of Mines, Explosive Objects and Obscured Targets XV*, Orlando, FL, vol. 7664, 2010
40. G. Greenwood, "Deceptive strategies for the evolutionary minority game", *Proc. 2009 IEEE Symposium on Computational Intelligence and Games*, 25–31, 2009
41. G. Greenwood and M. Joshi, "Evolving fault tolerant digital circuitry: comparing population-based and correlation-based methods", *Proc. 2009 IEEE Congress on Evolutionary Computation*, 2796–2801, 2009
42. G. Greenwood, "Is it time to stop evolving digital systems?", *Proc. 2009 IEEE Workshop on Evolvable & Adaptive Hardware*, 54–58, 2009
43. B. Aktan and G. Greenwood, "Evolutionary computation in pre-silicon verification of complex microprocessors", *Proc. 2009 IEEE Workshop on Evolvable & Adaptive Hardware*, 25–31, 2009
44. G. Greenwood and R. Tymerski, "A game-theoretical approach for designing market trading strategies", *Proc. 2008 IEEE Symposium on Computational Intelligence and Games*, 316–322, 2008
45. C. Jorgensen, G. Greenwood and P. Arefi, "Practical considerations for implementing intrinsic faulty recovery in embedded systems", *Proc. 2008 IEEE Congress on Evolutionary Computation*, 757–764, 2008
46. P. Avery, G. Greenwood and Z. Michalewicz, "Coevolving strategic intelligence", *Proc. 2008 IEEE Congress on Evolutionary Computation*, 3522–3529, 2008
47. G. Greenwood and H. Abbass, "A new local search algorithm for continuous spaces based on army ant swarm raids", *Proc. 2007 IEEE Congress on Evolutionary Computation*, 1097–1102, 2007
48. S. Hutsell and G. Greenwood, "Applying evolutionary techniques to quantum computing problems", *Proc. 2007 IEEE Congress on Evolutionary Computation*, 4081–4085, 2007

49. M. Falconer, K. Kamisetty, A. Norman, Konika Ganguly, Kristina Morgan and G. W. Greenwood, "Using evolutionary algorithms for signal integrity checks of high-speed data buses", *Proc. 2007 IEEE Workshop on Evolvable & Adaptive Hardware*: 35–39, 2007
50. G. W. Greenwood, "Fault recovery using evolvable fuzzy systems", *Proc. 2007 IEEE Workshop on Evolvable & Adaptive Hardware*: 21–26, 2007
51. L. Zurk, D. Rouseff, J. Quijano and G. Greenwood, "Bistatic invariance principle for active sonar geometries", *Proc. 8th European Conf. on Underwater Acous.*: 787–792, 2006
52. B. Aktan, G. Greenwood and M. Shor, "Using optimal control principles to adapt evolution strategies", *Proc. 2006 IEEE Congress on Evolutionary Computation*, 995–1000, 2006
53. Garrison W. Greenwood, "Practical concerns when evolving circuits impervious to anticipated faults", *Proc. 2005 NASA/DOD Conf. on Evol. Hdwe*: 125–128, 2005
54. Ed Ramsden, Garrison W. Greenwood and David Hunter, "EARP-1: An evolvable analog research platform", *Proc. 2005 NASA/DOD Conf. on Evol. Hdwe*: 20–25, 2005
55. M. Terwilliger, A. Gupta, A. Khokhar and G. Greenwood, "Localization using evolution strategies in sensor networks", *Proc. 2005 IEEE Congress on Evolutionary Computation*, 35–40, 2005
56. Phillip Tomson and Garrison W. Greenwood, "Using ant colony optimization to find low energy atomic cluster structures", *Proc. 2005 IEEE Congress on Evolutionary Computation*, 121–126, 2005
57. Garrison W. Greenwood, David Hunter and Edward Ramsden, "Fault recovery in linear systems via intrinsic evolution", *Proc. 2004 NASA/DOD Conf. on Evol. Hdwe*, 115–122, 2004
58. Garrison W. Greenwood, "Differing mathematical perspectives of genotype space in combinatorial problems: metric spaces vs pretopological spaces", *Proc. 2004 IEEE Congress on Evolutionary Computation*, 258–264, 2004
59. Damon Miller, Rodrigo Arguello and Garrison W. Greenwood, "Evolving artificial neural network structures: experimental results for biologically-inspired adaptive mutations", *Proc. 2004 IEEE Congress on Evolutionary Computation*, 2114–2119, 2004
60. Garrison W. Greenwood, "Adapting mutations in genetic algorithms using gene flow principles", *Proc. 2003 IEEE Congress on Evolutionary Computation*, 1392–1397, 2003
61. G. Greenwood, E. Ramsden and S. Ahmed, "An empirical comparison of evolutionary algorithms for evolvable hardware with maximum time-to-reconfigure requirements", *Proc. 2003 NASA/DOD Conf. on Evol. Hdwe*, 59–66, 2003
62. M. Chrzanowska-Jeske, B. Wang and G. Greenwood, "Floorplanning with performance-based clustering", *Proc. ISCAS 2003*, 724–727, 2003
63. G. Greenwood and X. Song, "How to evolve safe control strategies", *Proc. 2002 NASA/DOD Conf. on Evol. Hdwe*, 129–130, 2002
64. B. Aktan, G. Greenwood and M. Shor, "Improving Evolutionary Algorithm Performance on Maximizing Functional Test Coverage of ASICs Using Adaptation of the Fitness Criteria", *Proc. IEEE Congress Evol. Comput.*, 1825–1829, 2002
65. M. Chrzanowska-Jeske, G. Greenwood and B. Wang, "Combining Evolution Strategies with Lagrangian Relaxation for Constructing Nonslicing VLSI Floorplans with Soft Modules", *Proc. IEEE Congress Evol. Comput.*, 1261–1266, 2002
66. B. Aktan, G. Greenwood, M. Shor and P. Doyle, "Maximizing Functional Test Coverage in ASICs Using Evolutionary Algorithms", *Proc. IEEE Congress Evol. Comput.*, 178–182, 2001
67. G. Greenwood, "Finding Solutions to NP Problems: Philosophical Differences Between Quantum and Evolutionary Search Algorithms", *Proc. IEEE Congress Evol. Comput.*, 815–822, 2001
68. G. Fogel, G. Greenwood and K. Chellapilla, "Evolutionary Computation with Extinction: Experiments and Analysis", *Proc. IEEE Congress Evol. Comput.*, 1415–1420, 2000

69. X. Hu, G. Greenwood and S. Ravichandran, "Modeling Epistatic Interactions in Fitness Landscapes", *Proc. IEEE Congress on Evol. Comput.*, 932–938, 2000
70. D. Miller, G. Greenwood and C. Ide, "On the Use of Biologically-Inspired Adaptive Mutations to Evolve Artificial Network Structures", *Proc. 2000 IEEE Symp. on Combinations of Evol. Comp. and Neural Net.*, 24–32, 2000
71. G. Greenwood, J. Shin, B. Lee and G. Fogel, "A Survey of Recent Work on Evolutionary Approaches to the Protein Folding Problem", *Proc. Cong. on Evol. Comput. 1999*, 488–495, 1999
72. G. Greenwood, G. Fogel and M. Ciobanu, "Emphasizing Extinction in Evolutionary Programming", *Proc. Cong. on Evol. Comput. 1999*, 666–671, 1999
73. G. Quan, X. Hu and G. Greenwood, "Preference Driven Hierarchical Hardware/Software Partitioning", *Proc. ICCD '99*, 652–657, 1999
74. X. Hu, G. Greenwood, S. Ravichandran, and G. Quan, "A Framework for User Assisted Design Space Exploration", *Proc. ACM/IEEE Design Auto. Conf.*, 414–419, 1999
75. G. Greenwood and Y. Liu, "Finding Low Energy Conformations of Atomic Clusters Using Evolution Strategies," *Proc. of Evolutionary Programming VII*, 493–502, 1998
76. J. Brown, D. Chen, G. Greenwood, S. Hu and R. Taylor, "Scheduling for Power Reduction in a Real-time System", *Proc. 1997 Int'l Symp. on Low Power Electronics and Design*, 84–87, 1997
77. G. Greenwood, "Experimental Observation of Chaos in Evolution Strategies", *Proc. of 1997 Int'l Conf. on Genetic Programming*, J. Koza, K. Deb, M. Dorigo, D. Fogel, M. Garzon, H. Iba and R. Riolo (Eds.), 439–444, 1997
78. E. DeDoncker, A. Gupta and G. Greenwood, "Adaptive Integration Using Evolutionary Strategies," *3rd Int'l Conf. on High Performance Computing*, 94–99, 1996
79. X. Hu, G. Greenwood and J. D'Ambrosio, "An Evolutionary Approach to Hardware/Software Partitioning," *Parallel Problem Solving from Nature IV*, Lecture Notes in Computer Science 1141, H.M. Voigt, W. Ebeleing, I. Rechenberg and H.P. Schwefel (Eds.), Springer-Verlag, 900–909, 1996
80. T. Piatkowski, G. Greenwood, X. Hu, J. Grantner and R. Taylor, "A Curriculum Proposal for an Innovative BS/MS Degree in Computer Engineering Emphasizing Real-time Embedded Systems," *Proc. of Workshop on Real-Time Sys. Education*, J. Zalewski (Ed.), 54–62, 1996
81. A. Gupta, G. Greenwood, R. Munnangi, and S. Ahire, "Parallel Implementations of Evolutionary Strategies," *Int'l Conf. on High Performance Computing*, 469–474, 1995
82. G. Greenwood, A. Gupta, and M. Terwilliger, "Scheduling Replicated Critical Tasks in Faulty Networks Using Evolutionary Strategies" *1995 IEEE Int'l Conf. on Evolutionary Computing*, 152–156, 1995
83. G. Greenwood, "Applications of Evolutionary Strategies in Training Partially Recurrent Neural Networks," *Proc. of MENDEL '95*, 53–58, 1995
84. G. Greenwood, C. Lang and S. Hurley, "Scheduling Tasks in Real-Time Systems Using Evolutionary Strategies," *3rd Workshop on Parallel & Dist. Real-Time Sys.*, 195–196, 1995
85. S. Hurley, G. Greenwood and C. Lang, "An Evolutionary Strategy for Scheduling Periodic Tasks in Real-Time Systems," *Proc. Applied Decision Technologies*, Brunel Conference Centre, London, 171–181, 1995
86. G. Greenwood, A. Gupta, and M. Terwilliger, "Task Redistribution in Faulty Networks Using Evolutionary Strategies," *Proc. of 1st Int'l Workshop on Parallel Proc.*, 249–254, 1994
87. G. Greenwood, "The State of Engineering Management: A View From the Trenches," *IEEE Int'l Conf. on Engineering Management*, 388–395, 1994
88. G. Greenwood, A. Gupta, and K. McSweeney, "Scheduling Tasks in Multiprocessor Systems Using Evolutionary Strategies," *Proc. of 1st IEEE Conf. on Evolutionary Computation*, 345–349, 1994

89. G. Greenwood, A. Gupta, and V. Mahadik, "Multiprocessor Scheduling of High Concurrency Algorithms," *Proc. of Florida AI Research Symp.*, 265–269, 1994
90. G. Greenwood and A. Somani, "A Methodology for Mapping Pipelined Algorithms Onto Hypercube Arrays", *Proc. ICPADS*, 117–124, 1992
91. G. Greenwood, "Practical Considerations for Executing Vision Algorithms on Parallel Arrays", *Proc. 26th Asilomar Conf.*, 1021–1025, 1992

- Book Chapters

1. Garrison W. Greenwood and Andy M. Tyrrell, "Metamorphic Systems: A Schema for Adaptive Autonomous Systems", in *Evolvable Hardware: From Practice to Application*, (M. Trefzer and A. Tyrrell, Eds.), 273–296, Springer, 2015
2. T. English and G. Greenwood, "Intelligent Design and Evolutionary Computation", *Design by Evolution: Advances in Evolutionary Design*, P. Hingston, L. Barone and Z. Michalewicz (Eds.), Springer, 7–30, 2008
3. G. Greenwood, "Attaining Fault Tolerance through Self-adaption: The Strengths and Weaknesses of Evolvable Hardware Approaches", *Computational Intelligence: Research Frontiers*, J. Zurada, G. Yen and J. Wang (Eds.), Springer, 368–387, 2008
4. G. Greenwood and J. Shin, "On the Evolutionary Search for Solutions to the Protein Folding Problem", *Evolutionary Computation in Bioinformatics*, G. Fogel and D. Corne (Eds.), Morgan-Kaufman, 115–136, 2002
5. G. Greenwood, X. Hu and J. D'Ambrosio, "Fitness Functions for Multipleobjective Optimization Problems: Combining Preferences with Pareto Rankings", *Foundations of Genetic Algorithms*, R. Belew and M. Vose (Eds.), Morgan-Kaufmann, San Francisco, CA, 437–455, 1997

- Book Reviews

1. Bio-Inspired Computing Machines: Towards Novel Computational Architectures, D. Mange and M. Tomassini (eds.), review published in *Genetic Prog. and Evolvable Mach.*, Vol 2, No. 1, 75–78, 2001
2. Evolutionary Programming VII: Proceedings of the 7th International Conference EP98, V.W. Porto, N. Saravanan, D. Waagen, and A. E. Eiben (eds.), review published in *IEEE Transactions on Evolutionary Computation* Vol. 3, No. 1, 75–76, 1999

Professionally Related Service

- Editorial Positions

1. Editor-in-Chief for *IEEE Transactions on Evolutionary Computation* (2009–2014)
2. Associate editor for *IEEE Transactions on Evolutionary Computation* (2000–2008)
3. Associate editor for *IEEE Transactions on Neural Networks* (1999)

- Committee Service

1. Vice-President (Conferences) for the IEEE Computational Intelligence Society (2006–2009)
2. Currently serving as member of the IEEE Computational Intelligence Society Technical Committee on Games
3. Served as member of the IEEE Computational Intelligence Society Technical Committee on Evolutionary Computation (2002–2008)
4. Served as the Technical Co-Chair of the 2016 IEEE Congress on Evolutionary Computation
5. Served as the General Chair of the 2012 IEEE Congress on Evolutionary Computation

6. Served as the General Chair of the 2004 IEEE Congress on Evolutionary Computation
7. Served as Technical Co-Chair (North America) for the World Congress on Computational Intelligence 2002
8. Served as Special Sessions Chairman for IEEE Congress on Evolutionary Computation 2001
9. Served as Poster Chairman for IEEE Congress on Evolutionary Computation 2000
10. Served on program committee for IEEE Congress on Evolutionary Computation 1999
11. Served on program committee for Evolutionary Programming '98 conference
12. Served on International Program Committee for MENDEL '95 conference

- Memberships

1. Served as faculty advisor for TAU BETA PI engineering honor society (1996-1999)
2. Served as faculty advisor for ETA KAPPA NU electrical engineering honor society (2000-2003)

Memberships in Professional Societies

- senior member of IEEE
- lifetime member of TAU BETA PI (engineering honor society)
- lifetime member of ETA KAPPA NU (electrical engineering honor society)

Military Service

Retired from U.S. Army as a Lieutenant Colonel. Total service included three years active duty and 29 years in U.S. Army Reserve.

Life member Veterans of Foreign Wars. Currently attached to VFW Post 10580.