

Curriculum Vitae

Alison Watkins

Education

University of Plymouth (UK)	Computer Information Systems	Ph.D. 1996
University of Plymouth (UK)	Intelligent Systems	M.S. 1992
Babson College	Management and Communications	B.S. 1985

Academic Positions

2008 – present	Associate Dean for Graduate and Certificate Programs University of South Florida St Petersburg St Petersburg, FL
2007 – present	Associate Professor of Information Systems University of South Florida St Petersburg St Petersburg, FL
2001 – 2007	Assistant Professor of Information Systems University of South Florida St Petersburg St Petersburg, FL
1998 – 2001	Associate Professor of Computer Science and Director – Distance Education Program University of the Virgin Islands, St Thomas, USVI
1995 – 1998	Lecturer (Assistant Professor) University of Plymouth Business School Plymouth, United Kingdom
1994 – 1998	Lecturer (Part-time) Open University Milton Keynes, United Kingdom
1992 – 1995	Lecturer (Part-time) University of Plymouth Business School and School of Computing Plymouth, United Kingdom

Industry Positions

1998 – 1991	Operations Manager Eastbrook Ltd, Hamilton, Bermuda and New York
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1986 – 1988	Loan Administrator Bankers Trust Company, New York
1985 – 1986	Loan Administrator Sumitomo Bank, New York

Courses Taught at USF St Petersburg

Teaching assignments have included both technical and managerial classes and have been split between upper and lower division Undergraduate classes and MBA classes.

Undergraduate	ISM 4141 Web Based Java Applications ISM 4382 Global Information Systems ISM 3232 Business Application Development ISM 3011 Information Systems in Organizations CGS 2100 Computers in Business
Graduate	ISM 6021 Management Information Systems ISM 6930 Knowledge Management GEB 6930 Dynamic of Individuals and Technology

Research Interests

Research focuses on the application of genetic algorithms intelligent systems, agent-based systems and modeling to solve business problems.

Journal Publications

1. Hill. R.P. and Watkins A. 2011. Balancing Morality in Marketing: Oxymoron or Good Business Practice? *Journal of Business Research*, 64 (8) 922-927. *Refereed. Discipline Based.*
2. Cassill, D., Hardisty, B. and Watkins, A. 2011 “A 4-D natural selection model illuminates the enigma of altruism in the Shedao Pit Viper” *Journal of Bioeconomics*, 13 (1) 17-29. *Refereed. Discipline Based.*
3. Cassill, D. and Watkins, A. 2010. “The evolution of cooperative hierarchies through natural selection process. *Journal of Bioeconomics*, 12 (1) 29-42. *Refereed. Discipline Based.*
4. Hill. R.P. and Watkins A. 2009. The profit implications of altruistic versus egoistic orientations for business-to-business exchanges in *International Journal of Research in Marketing*, 26 (1) 52-59. *Refereed. Discipline Based.*
5. Watkins, Alison and Hill R.P 2009. “A Simulation of Business-To-Business Decision Making in a relationship marketing context,” *Industrial Marketing Management*, 38 (2009) 994-1005. *Refereed. Discipline Based.*
6. Watkins, A. and Hufnagel E. 2007. “Video Vignettes: Teaching Computer Programming to the MTV Generation,” *Decision Science Journal of Innovative Education*, 5 (2) 391-395. *Refereed. Learning and Pedagogy.*
7. Hill, R. and Watkins, A. 2007. “A Simulation of Moral Behavior within Marketing Exchange Relationships,” *Journal of the Academy of Marketing Science*, 35 (3) 417-429. *Refereed. Discipline Based.*

8. Butel L. and Watkins, A. 2006. "Clusters of entrepreneurs: The application of ant colony optimization modelling," *Journal of Modelling in Management*, 1 (3)255-269.
9. Watkins, A. Hufnagel, E. Berndt, D., Johnson, L. 2006. "Using Genetic Algorithms and Decision Tree Induction to Classify Software Faults," *International Journal of Software Engineering and Knowledge Engineering*, (16:2): pp. 269-291.
10. Watkins, A. and Hufnagel, E. M. 2006. "Evolutionary Test Data Generation: A Comparison of Fitness Functions," *Software: Practice and. Experience*, (36:1), pp. 95-116.
11. Watkins, A. and Hill, R.P. 2005. "The Impact of Personal and Organizational Moral Philosophies on Marketing Exchange Relationships: A Simulation Using the Prisoner's Dilemma Game," *Journal of Business Ethics*, (62:3), pp. 253-265.
12. Butel, L. and Watkins, A. 2004. "What the Entrepreneur Does: A Study of Ant Colony Optimisation Techniques," *ICFAI Journal of Entrepreneurship Development*, (Dec), pp. 10-16.
13. Cassill., D and Watkins, A. 2004. "Mogul Games: In Defense of Inequality and Evolutionary Strategy to Cope with Multiple Agents of Selection," in (Koppl, R., ed), *Evolutionary Psychology and Economic Theory, Advances in Austrian Economics, Vol. 7*.
14. Butel, L and Watkins, A. 2000. "Evolving Complex Organisational Structures in New and Unpredictable Environments," *Journal of Business Research*, (47:1), pp. 27-34.
15. Watkins, A. and Watlington, R., 2000. "Progress and Potential of Distance Education in the Caribbean," *Caribbean Perspectives*, (Jan), pp. 16-22.

Published Proceedings

1. Berndt D. and Watkins, A. "High Volume Testing using Genetic Algorithms," *Proceedings of the 38th Hawaii International Conference on Systems Sciences*, January 2005: pp. 318b.
2. Berndt. D. and Watkins, A. "Investigating the Performance of Genetic Algorithms Based Software Test Case Generation. *Proceedings High Assurance Systems Engineering*, March 2004, pp. 261-262.
3. Watkins, A, Berndt, D. Fisher, J. Johnson, L. Pinglikar, J. and Aebisher, K. "Breeding Software Test Cases for Complex Systems," *Proceedings of the 37th Hawaii International Conference on Systems Sciences*, January 2004, pp. 90303c.
4. Berndt, D. Watkins, A. Fisher, J. Johnson, L. Pinglikar, J. and Aebisher, K. "Using Genetic Algorithms and Decision Tree Induction to Classify Software Faults," *Proceedings Conference on Information Systems and Technology*, November 2003.
5. Watkins, A. "Test Data Generation using Genetic Algorithms – A Comparison of Fitness Functions," *Proceedings of The 7th IASTED International Conference on Software Engineering and Applications*, November 2003, pp 338_.
6. Berndt, D. Fisher, J. Johnson, L. Pinglikar, J. Watkins A. "Breeding Software Test Cases with Genetic Algorithms," *Proceedings of the 37th Hawaii International Conference on Systems Sciences*, January 2003, pp. 338.

7. Butel, L. and Watkins, A.. "What the Entrepreneur Does. A Study of Ant Optimization Techniques and Entrepreneurial Activity," *Proceedings of the European Academy of Management Conference*, 2002.
8. Watkins, A. , Davalos, S., Butel, L., Boumedine, M. "Multi-Ant Behaviors in Ant Colony Optimization for Strategic Network Modeling," *Proceedings of the Southern Association of Information Systems Conference*, March 2002.
9. Watkins, A. Butel, L. Davalos, S. "Modeling Strategic Networking Using Ant Colony Optimization Techniques," *Proceedings of the Americas Conference on Information Systems*, August 2001.
10. Watkins, A. and Steadman, P. "The Impact of Information Technology on General Practitioners Acting for Small Businesses," Institute of Chartered Accountants Working Paper Series, 1998.
11. Watkins, A., Butel, L. "Using Genetic Algorithms to Evolve Market Share in New and Unpredictable Environments," *Proceedings of EXPERSYS 97*, 1997, pp.87 – 92..
12. Butel, L. and Watkins, A. "Evolving Complex Organisational Structures in New and Unpredictable Environment using Genetic Algorithms," *Proceedings of Surrey European Management School*, 1997.
13. Butel, L. and Watkins, A. "Strategic Intent, International Competition for the European Domestic Utilities Markets: First Movers in South West Britain," *Proceedings of the Eastern Academy of Management, Managing in a Global Economy VII*, 1997.
14. Butel, L. Watkins, A. "Order of Entry and Strategic Intent: Aspects of International Competition in the Far South West of Britain," *Proceedings EIBA Conference (European International Business Academy)*, Stockholm, 1996.
15. Watkins, A. and Farrar, S.V. "Automatic Generation of Software Test Data using Genetic Algorithms and Relaxation Techniques," *Proceedings of EXPERSYS 96*, Paris, 1996, pp.511 - 516.
16. Watkins, A. and Farrar, S.V. "Simulated Annealing and Genetic Algorithms for the Optimisation of Corporate Taxation for Capital Budgeting," *Proceedings, Applications of Artificial Intelligence for Technological and Business Process*, (M. Polkinghorne, ed.), 1996, pp. 57-63.
17. Watkins, A. "A Tool for the Automatic Generation of Test Data using Genetic Algorithms," *Proceedings of Software Quality Conference*, Dundee, Scotland, 1995, pp. 300 – 309.
18. Watkins, A. "Genetic Algorithms Combined with Tabu Search for the Automatic Generation of Test Data," *Proceedings Polymodal 16* (A.O. Moscardinini and P. Smith eds.), Sunderland, England, 1995, pp. 119 - 128.

Grants Received

1. Florida Space Research & Education Grant Program. 2004.
Species adaptive algorithms for path planning in space exploration robots.
Role: Principal Investigator \$ 34,136

2. USA Space and Naval Warfare Systems Command. 2001-2004 .
N00039-01-1-2249 National Institute for Systems Test and Productivity
Grant Total: \$8.1M.
Role: Researcher \$ 51,769
3. USF New Researcher Grant. 2004. Evolutionary Test Data Generation –
An Analysis of Branch Testing Fitness Functions.
Role: Principal Investigator \$ 9,849
4. USF St Petersburg New Researcher Grant. 2004. Autonomous and
Cooperative Robots for Path Planning.
Role: Principal Investigator \$ 3,000
5. USF Innovative Teaching Grant. 2004.
Role: Principal Investigator \$ 4,076

University and Institutional Service

University South Florida St Petersburg

- PEBC – Member (2009 – present, chair 2011-2012)
- Coordinator – IS/DS (2005 – present)
- Member – College of Business - Graduate Curriculum Committee
(2004 – present (Ex-Officio 2009+))
- Member – College of Business – Undergraduate Curriculum Committee (2010 –
2011)
- Member – College of Business Building Committee (2009-2011)
- Member – College of Business Council (Spring 2005, 2006 – 2008 (Chair 2008))
- Member – Search Committee for Dean – College of Business (2006)
- Member – College of Business – Research Committee (2005 – 2006)
- Member – Search Committee IS/DS (6 positions) (2001,2002, 2003,2007, 2010)
- Member – Search Committee for Director Institutional Research
(2002-2003)
- Reviewer – USF Research Grants Award Committee (2004 - 2006)
- Assessment Coordinator – IS./DS (2005)

University of the Virgin Islands

- Chair – Distance Education Policy – Faculty Development Group
- Director – Title III – Distance Education Project
- Coordinator – Computer Science

Plymouth Business School

- Member – Inter-disciplinary committee to develop Masters in Computational
Intelligence.
- Member – Committee developing new BA in Business Studies.