

**Dr Samuel Mann** is Associate Professor Information Technology at Otago Polytechnic where he has worked since 1997, including five years as Head of Department. Sam has published over 150 conference and journal papers in the fields of augmented experiences; sustainability; and computer education.



Sam has been responsible for the development of Education for Sustainability at Otago Polytechnic. A major transformation has seen the integration sustainable practice at every level and we can be very proud of the progress towards having “every graduate thinking and acting as a sustainable practitioner”. This initiative won the ITPNZ Award for Excellence in Education for a Global Role.

Sam is working in computing to develop strategies, practices and resources for computing to contribute positively to a sustainable future. He led the development of the draft statement on Education for Sustainability for the ACM SIG-CSE, which followed up on the success of New Zealand NACCQ policy and agenda on computing education for sustainability.



Sam is convenor of Sustainability in Tertiary Education in New Zealand (STENZ), a cross sector group with the vision that “**In 2014, all NZ tertiary graduates will understand the principles, values, and practices of sustainability**”.

In 2009 Sam was the Beeby Fellow for his work in Education for Sustainability. The Beeby fellowship is a joint initiative between New Zealand National Commission for UNESCO and the NZ Council of Education Research.

Sam teaches Software Engineering (using a hybrid Agile Development Framework) and manages the capstone industry projects. He and his students work on systems that harness the power of technology to help engage people with information: the goal is to make the computer invisible and to instead focus on promoting engaging experiences. Sam is on the National Advisory Committee on Computing Qualifications. Sam's current research, SimPä, works with Māori communities to retell their stories in 3D game format (teaching Māori kids programming in the process!).

Sam maintains a blog:

<http://computingforsustainability.wordpress.com/>



## **Associate Professor SAMUEL MANN**

---

Address: 19 Leckhampton Court., Dunedin, New Zealand  
E-mail: Samuel.mann@op.ac.nz  
D.O.B.: 5th August 1970  
Birth Place: Derby, England  
Citizenship: New Zealand/Britain  
Health: Excellent  
Phone +64 3 479-6128 (wk)  
Fax +64 3 474 1395

### **Qualifications**

---

- PhD (Otago 1998)
- Master of Science (with Credit) in Geography
- Graduate Certificate in Tertiary Learning and Teaching (Level 7)
- Bachelor of Science (Honours) in Geography: First class

### **Tertiary Education**

---

#### **Otago University 1988-1997**

- 1994-1997 PhD in Information Science  
Thesis title "Spatial Process Modelling for Regional Environmental Decision Making" (abstract attached)
- 1992-1993 Master of Science in Geography (abstract attached)
- 1988-1991 Bachelor of Science Honours (1st class) in Geography/Botany

### **Relevant work and research experience**

---

2007-2005- Education for Sustainability portfolio, Otago Polytechnic  
Associate Professor, Creative Technologies Group  
Otago Polytechnic

2002 - March 2006 Head of Department, Department of Information  
Technology and Electrotechnology, Otago Polytechnic

Aug-Dec 2002 Head of School (Acting), School of Information  
Technology and Electrotechnology, Otago Polytechnic

2000 - 2002 Programme Manager, School of Information Technology  
and Electrotechnology, Otago Polytechnic

2000 Senior Lecturer, Department of Commerce, Otago  
Polytechnic

1999 Acting Programme Manager (Bachelor of Information  
Technology (August-November))

1997-2000 Lecturer, Department of Commerce, Otago Polytechnic

1997	Senior Teaching Fellow, Department of Information Science, University of Otago
1994-1997	Department of Information Science Doctoral Programme
1994 (to present)	Consultant to various Industries, Local and Regional Councils, Crown Research Institutes, Ministries and Local Agencies
1994-1997	Research Assistant, Coordinating Tutor, Demonstrator, Spatial Information Research Centre and Department of Information Science, Otago University
1997	“Web-master” Department of Information Science, University of Otago
1997	Research Assistant, Research and International Office, University of Otago
1994- 1996	Land Resource Officer, Otago Regional Council,
1993	Research Assistant on BOREAS project (Nebraska USA, NASA)
1992,3,6,7	Research Assistant, Geography Department OU
1991-1993	Tutor, Demonstrator, Geography Department OU
1989-1993	Demonstrator, Botany Department OU
1990/1991	Contract analyst for the Ministry of Agriculture and the Otago Regional Council (Rabbit and Land Management Programme).

## Teaching

---

At Otago Polytechnic I have been responsible for the following courses, primarily in the B.Info.Tech

- PJ301 Project / IN700001/2 Capstone Project
- IT309 Third year database
- OS210 Second year Operating Systems
- OS103 First year Operating Systems
- 250 Applied Computing (NZDB)
- DB103 First year Databases and System Design
- IT306 Third year Information Systems Management (redeveloped curriculum 1999)
- IT205/IN602001 Second year Systems Analysis and Design (Software Engineering) (entirely redeveloped curriculum in 1999, 2002, 2006,2010)
- IT314 eCommerce (new 2000, developed curriculum)
- IT213 Hypermedia Engineering (new 2002, developed curriculum)
- IT212 Innovation and Design (new 2002, developed curriculum)
- Interactivity Design (Second year B Design Communication)
- Interaction Design (Final year B Design Communication)

## Awards

---



- Otago University Award in Science (1991)
- Bank of New Zealand Post Graduate Scholarship (1992)
- Otago University Post Graduate Award (1992, 1993)
- Sixth Colloquium of the Spatial Information Research Centre, Award for best paper for MANN, S., HOLLAND, P.G., KASABOV, N. and MORGAN, R.K. *The integration of ecological modelling, remote sensing and GIS for monitoring and prediction in tussock grasslands* (1994)
- Otago University Post Graduate Scholarship (1995, 1996, 1997)
- APNZ Student Award for Excellence for their work on the Otago Polytechnic Research Web- awarded to BIT Database 3 (2000)
- Otago Polytechnic Staff Award for Excellence in Teaching and Research (2000)
- 13<sup>th</sup> Annual NACCQ, Award for best poster for MANN, S. MCGREGOR, G. *A Web-based Infrastructure Supporting Research at Otago Polytechnic* (2000)
- 14<sup>th</sup> Annual NACCQ, Delegates Award for best presentation, SMITH, L.M., MANN, S. and BUISSINK-SMITH, N. *Crashing a Bus Full of Empowered Software Engineering Students* (2001)
- 14<sup>th</sup> Annual NACCQ, Alison Young Award for best research paper, BARCLAY, K., MANN, S., BROOK, P. and DOONAN, A. *Development and Testing of an Adaptive Computer Keyboard Interface* (2001)
- Otago Polytechnic nomination for APNZ Staff Award (2001)
- Wickliffe Award for Best Poster, 16<sup>th</sup> Annual NACCQ. MANN, S., VAN DYK, J. and BROOK, P. *Art of Computers – Computers of Art*

- 16<sup>th</sup> Annual NACCQ Best Concise Paper, BREMER, D., and MANN, S. (2003) *Negotiated contract learning*
- 2003 IPTNZ/APNZ Award for Technology in Education with Justin McCormack, Chris Rosescu, Peter Garrett and David Youngman for work with Otago Museum 2003
- 2003 IPTNZ Microsoft Award for Technology in Education with Russell Jordan for *Knightsmove*
- 2004 Alison Young Award for best research paper *Role of the development methodology and prototyping within capstone projects*, Samuel Mann and Lesley Smith
- 17<sup>th</sup> Annual NACCQ Best Concise Paper *Knightsmove*, Russell Jordan and Samuel Mann 2004
- 17<sup>th</sup> Annual NACCQ Best poster paper *Event layout design system*, David Wade and Lyndsay Roger, Andrew Sewell and Samuel Mann
- 17<sup>th</sup> Annual NACCQ Software award *Event layout design system*, David Wade and Lyndsay Roger with Andrew Sewell and Samuel Mann
- 2003 IPTNZ Microsoft Award for Technology in Education Software award *Event layout design system*, David Wade and Lyndsay Roger with Andrew Sewell and Samuel Mann
- CITRUS New Zealand Award for Collaborative Research 2005 – Museum Interactivity with Lesley Smith
- 19<sup>th</sup> Annual NACCQ Award for Unique Contribution to Computing Education - Maori Game Design, with Russell, K., Camp, J., Crook, M., Wikaira, J
- 19<sup>th</sup> Annual NACCQ Award for Best Student Poster - Rugby Moves to 3D, with Johnston, M., Thamizh Selvan M., Haden, P.
- 2007 Otago Polytechnic Award for Excellence in Sustainable Practices
- 2008 ITPNZ Award for Excellence in Education of Global Significance
- 22<sup>nd</sup> Annual NACCQ, Award for Best Paper and Alison Young Cup. Benchmarking sustainability values of incoming computing students. With Mann, S. Smith, L. G., Shephard, K., Smith, N. Deaker, L.

- 2009 22nd Annual NACCQ Award for Educational Innovation - Simpa in review, with Weatherall, V., Mann, S., Russell, K.
- CITRUS Award for Collaborative Research – Computing Education for Sustainability, Young, A., Mann, S., Smith, L.G., Muller, L.
- 2009 22nd Annual NACCQ, Award for Excellence in Student Research: Trevor Farquharson, Gareth Dorest, Jun Cui, Samuel Mann, Patricia Haden (2009) A virtual ant farm.
- 2008 New Zealand Council of Education Research and National Commission of UNESCO Beeby Fellow.



## Quality Assured papers

---

- SMITH, B. WILSON, J.B. GROVE, P., HARRIS, N.S., MANN, S. and MOORE, S. (1994) Vegetation Texture as an approach to Community Structure: Community level convergence in New Zealand Temperate rainforest. *New Zealand Journal of Ecology* 18(1):41-50.
- MANN, S., HOLLAND, P.G., KASABOV, N. and MORGAN, R.K. (1994) The integration of ecological modelling, remote sensing and GIS for monitoring and prediction in tussock grasslands, *Sixth Colloquium of the Spatial Information Research Centre*, University of Otago, New Zealand May 17-19th 1994; 31-44.
- MANN, S. and BENWELL, G.L. (1995) Geographic Information Systems in Environmental Management, *AURISA/ 7th Colloquium of the Spatial Information Research Centre*, Palmerston North, NZ, May 1995; 295-310
- MANN, S. (1995) The derivation of a Land Health Index using GIS, remotely sensed imagery and community based monitoring, *AURISA/ 7th Colloquium of the Spatial Information Research Centre*, Palmerston North, NZ, May 1995; 389-398.
- MANN, S. (1995) [A Case Study in Environmental Decision Making](#), *Environmental Perspectives*, 1995 8(August): 1-4.
- MANN, S. (1995) [Spatial process modelling for regional environmental decision making](#), *8th Colloquium of the Spatial Information Research Centre*, 126-135
- MANN, S. and BENWELL, G.L. (1996) Artificial Intelligence in the management of tussock grasslands in New Zealand, [Computers and Geoscience](#), 22(9) 1003-1012.
- MANN, S. (1996) *Environmental Decisions with Spatial Process Modelling*, in Abrahart, R.J. (Ed) 1st International Conference on GeoComputation, School of Geography, University of Leeds, UK. Vol 2: 559-574.
- MARR, A. J., MACDONELL, S., BENWELL, G. L. and MANN, S. (1997). *Spatial Process Modelling and Interoperability*. [International Conference on Interoperating Geographic Information Systems](#), Santa Barbara 3-4 Dec, National Center for Geographic Information and Analysis. p127-141



- ALBRECHT, J.H., JUNG, S. and MANN, S. (1997) GIS Shells for the Conceptual Design of Environmental Models. in Kemp, Z. (ed) [Innovations in GIS 4](#). Taylor and Francis, London, 154-165.
- MANN, S. (1997) [The GIS revolution, are we ready for Geocomputation?](#) (1997) R.T. Pascoe (ed) [Second International Conference on GeoComputation and SIRC'97](#) University of Otago, August 1997, 31-39.
- MARR, A.J., PASCOE, R.T., BENWELL, G.L., AND MANN, S. (1998) *Development of a Generic System for Modelling Spatial Processes*, [Journal of Computers, Environment, and Urban Systems](#), 22(1) 57-69.
- MANN,S and MCQUEEN, M. (1998) A relational algebra approach to problems of spatio-temporal representation FIRNS, P. (ed) SIRC 98: [The 10th Annual Colloquium of the Spatial Information Research Centre](#). University of Otago, 219-228
- MARR, A.J., PASCOE, R.T., BENWELL, G.L., AND MANN, S. (1998) *Development of a Generic System for Modelling Spatial Processes*, [Journal of Computers, Environment, and Urban Systems](#), 22(1) 57-69.
- MANN, S. and BROWN, I. (1998) *Decision support for Environmental Accreditation*, [New Zealand Journal of Applied Computing and Information Technology](#), 2(2):39-53
- MANN,S. and MCQUEEN, M. (1998) *Relational database representation of real world phenomena* [New Zealand Journal of Applied Computing and Information Technology](#), 2(2):54-61
- MANN, S., BROOK, P. and PARTRIDGE, B (2000) *A rural network using existing electric fencing* [New Zealand Journal of Applied Computing and Information Technology](#) 4:66-69
- BROOK, P. and MANN, S., (1999) *Teaching and Research in Polytechnics?* [New Zealand Journal of Applied Computing and Information Technology](#)
- MANN, S. BROWN, I. (2000) *Working with Farmers: A Practical System for Proving and Improving Environmental Management* [Environmental Perspectives Journal](#) (22) 4-6
- MANN, S, COWAN, K. (2001) *Degrees of Information Technology in New Zealand Vocational Institutions* [New Zealand Journal of Applied Computing and Information Technology](#) 5(1):60-65

- MANN, S. and BUISSINK-SMITH, N. (2001) What the students learn: learning through empowerment New Zealand Journal of Applied Computing and Information Technology 5(2):35-41
- MANN, S. and McQUEEN, M. (2001) A language based optical character recogniser (OCR) for reading incidental text New Zealand Journal of Applied Computing and Information Technology 5(2):42-47
- SMITH, L.G., MANN, S. and BUISSINK-SMITH, N (2001) Crashing a bus full of empowered software engineering students New Zealand Journal of Applied Computing and Information Technology 5(2):69-74
- WILLIAMSON, A. MANN, S (2002) Seeding A Culture Of Innovation And Collaborative Research At The Grassroots Through A Nationally Co-ordinated Centre For Research Excellence. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 143- 154
- MANN, S., WILLIAMSON , A. and HYND, R. (2003) *Dancing in the moonlight: The nature and extent of portfolio employment by IT academics* Full paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p119 – 124
- HADEN, P. and MANN, S. (2003) *The trouble with programming* Full paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p63-70, 108
- VAN DYK, J., MANN, S. and BROOK, P. (2003) *Images of computers: a prehistory – hopes and fears realized?* Full Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p177 – 188
- WILLIAMSON, A. and MANN, S. (2003) ICT Research at the grassroots: a national network for research and innovation. *New Zealand Journal of Applied Computing and Information Technology* 7(1):116-120
- SMIT, R. and MANN, S. (2003) A design paradigm for wearable computing *New Zealand Journal of Applied Computing and Information Technology* 7(1):99-101
- MANN, S. SMITH, L.G. (2004) Role of the development methodology and prototyping within capstone projects . *Proceedings 17th Annual NACCQ*, Mann, S. & Clear, T. (eds). Christchurch. July 6-9th 2004. p119-128.

- SMITH, L.G., MANN, S. (2004) Projecting Projects: Choosing Software Engineering Projects, *Proceedings 17th Annual NACCQ*, Mann, S. & Clear, T. (eds). Christchurch. July 6-9th 2004. p183-190.
- BREMER, D., MANN, S. (2005) Best Practices for IT Education: Vocational and Continuous Learning *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p11-18
- MANN, S. (2005) Visions, hype and confusion: selling computing futures in institutional marketing *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p55-64
- MANN, S. and SMITH, L.G. (2005) Exhibiting reality: collaboration in practice *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p65-74
- FREW, Z. and MANN, S. (2006) Similarity and originality in code: plagiarism and normal variation in student assignments, Eighth Australasian Computing Education Conference (ACE2006), Hobart, Tasmania, Australia, January 2006 ACM International Conference Proceeding Series; Vol. 165.
- LOPEZ, M., S. MANN, P. J., A. SEWELL and C. STOTT (2006). A standards-based approach to Federated Identity. *19th Annual Conference of the National Advisory Committee on Computing Qualifications*, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.157-163
- MANN, S., K. RUSSELL, J. CAMP, M. CROOK and J. WIKAIRA (2006). Maori Game Design. *19th Annual Conference of the National Advisory Committee on Computing Qualifications*, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.165-173
- MANN, S. and L. SMITH (2006). A value proposition model for capstone projects. *19th Annual Conference of the National Advisory Committee on Computing Qualifications*, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.175-182
- MANN, S. and L. SMITH (2006). Arriving at an agile framework for teaching software engineering. *19th Annual Conference of the National Advisory Committee on Computing Qualifications*, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.183-190
- MANN, S., & SMITH, L. G. (2006). Exhibiting reality: collaboration in practice. *New Zealand Journal of Applied Computing and Information Technology*, 46-56.

- MANN, S., & SMITH, L.G. (2006). Insisting on best of practice within capstone projects. *New Zealand Journal of Applied Computing and Information Technology*, 57-63.
- MANN, S. and SMITH, L.G. (2007). Computing and sustainability. 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 157-162
- MANN, S. and SMITH, L.G. (2007). Computing Education for Sustainability. 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 163-174
- GOODWIN, M. and MANN, S. (2007). Multiple perspectives on a capstone project. *20th Annual Conference of the National Advisory Committee on Computing Qualifications*, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 73-80
- MANN, S. and SMITH, L.G. (2007). Software engineering class eating its own tail. In Proc. Ninth Australasian Computing Education Conference (ACE2007), Ballarat, Australia. CRPIT, 66. Mann, S. and Simon, Eds., ACS. 115-123
- MANN, S. RUSSELL, K. (2007) Worlds colliding: Participatory storytelling and indigenous culture in building interactive games. *International Cultural Heritage Informatics Meeting - ICHIM07: Proceedings* Toronto Ontario, Canada, October 24-26, Toronto, Editor Trant, Jennifer; Bearman, David <http://www.archimuse.com/ichim07/papers/mann/mann.html>
- MANN, S., SMITH, L, MULLER, L. (2008) Computing education for sustainability, *ACM SIGCSE Bulletin* 40(4):183-193
- MANN, S. SMITH, L. G., SHEPHARD, K., SMITH, N. DEAKER, L. (2009) Benchmarking sustainability values of incoming computing students. *22nd Annual Conference of the National Advisory Committee on Computing Qualifications*, Napier, 10-13th July, 43-52.
- WEATHERALL, V., MANN, S., RUSSELL, K. (2009) SimPa in review. *22nd Annual Conference of the National Advisory Committee on Computing Qualifications*, Napier, 10-13th July, 133-140
- YOUNG, A., MANN, S., SMITH, L.G., MULLER, L. (2009) Computing Education for Sustainability: Madrid and beyond. *22nd Annual Conference of the National Advisory Committee on Computing Qualifications*, Napier, 10-13th July, 141-146

SHEPHARD K. , MANN S. , SMITH N. and DEAKER L (2009) Customising educational approaches to the needs of students: but how well do we know our students' needs? HERDSA Charles Darwin University, 6-9<sup>th</sup> July, Darwin, (digital) <http://conference.herdsa.org.au/2009/>

SHEPHARD K. , MANN S. , SMITH N. and DEAKER L. (2009) Benchmarking the environmental values and attitudes of students in New Zealand's post-compulsory education. Environmental Education Research 15(5) 571-587

MANN, S., L. MULLER, J. DAVIS, C. RODA and A. YOUNG (2009). "Computing and sustainability: evaluating resources for educators." SIGCSE Bull. 41(4): 144-155.

MANN, S., RUSSELL, K. (2010) Protecting Treasures: Engaging Communities and recreating narratives, Museums and the Web <http://www.archimuse.com/mw2010/papers/mann/mann.html>

BUISSINK-SMITH, N., MANN, S. AND SHEPHARD, K. (2011) How do we measure affective learning in higher education? *Journal of Education for Sustainable Development* (in press)

### **Other Conference Papers, Book Chapters and Non Refereed Journal Articles**

---

BENWELL, G.L., MANN, S. and SMITH, C.B. (1995) *Integrating modelling and simulation into a problem solving paradigm for improved regional and environmental decision making*, in McAleer, M., Binning, P., Bridgman, H., and Williams, B. (Eds) International Congress on [Modelling and Simulation](#), University of Newcastle, Newcastle NSW, 4:216-220, 1995.

PURVIS, M., PURVIS, M., BENWELL, G.L. and MANN, S. (1995) *Modelling and simulation of a New Zealand Legislative Act*, in McAleer, M., Binning, P., Bridgman, H., and Williams B. (Eds) International Congress on Modelling and Simulation, University of Newcastle, Newcastle NSW, 4:313-318, 1995.

BENWELL, G. L., MANN, S. and SMITH, C.B. (1995) Integrating modelling and simulation into a problem solving paradigm for improved regional and environmental decision making, *Information Science Discussion Paper Series*, University of Otago, 95/14, 9 pages.

- MANN, S. (1995) A Case Study in Environmental Decision Making, *The Information Science Discussion Paper Series*, University of Otago, 95/12, 9 pages.
- BENWELL, G. L., KASABOV, N., PURVIS, M., ZHANG, I., MCLENNAN, B. and MANN S. (1995) *Spatial Analysis with Artificial Neural Networks*, in McDonald, C., (Ed) International Workshop on Artificial Intelligence and the Environment, Canberra, Australia, 43-52, October, 1995.
- ALBRECHT, J. H., JUNG, S. and MANN, S. (1996). *VGIS-- a GIS shell for the conceptual design of environmental models*. [GISRUK'96](#), Canterbury UK., 121-136.
- MANN, S. (1996) Survey: Computers in Environmental Management, *Broadsheet; Journal of the New Zealand Association of Resource Management*, May: 20-23.
- MANN, S. (1998). TIMS: Total Integrated Management System for Environmental Accreditation, Dunedin, (Otago Regional Council and NOSLM) (Software)
- MANN, S., BENWELL, G.L. and LEE, W.G. (1998) Landscape Indicators of Ecosystem Biodiversity for Conservation Management, Research in the Taeri Catchment, Ecology Research Group Occasional Paper No.1., Hamel, J. (editor), Otago University, p26-27
- MARR, A.J., MANN, S., MACDONELL, S., AND BENWELL, G.L. (1998) *The Development of a Documentation Structure for Spatial Process Models*, [3rd International Conference on GeoComputation](#), Bristol, England, 17 - 19 Sept.
- MANN,S. and MCQUEEN, M. (1998) *Natural world databases*, Presented at the Conference of the National Advisory Committee on Computing Qualifications, Auckland 6-10 July.
- MANN, S. and BROWN, I. (1998) *Collaboration in the development of decision support for Environmental Accreditation*, Presented at the Conference of the National Advisory Committee on Computing Qualifications, Auckland 6-10 July.
- BROOK, P. and MANN, S., (1999) *Teaching and Research in Polytechnics?* Presented at the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. pg 43-51

- BROOK, P., TROUNSEN, R. and MANN, S. (1999) A bionic baby for teaching and research , Presented at the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. pg53-57
- MANN, S., BROOK, P. GRAY, J.T. and FOGARTY, S.(1999) *General purpose reading device for the visually impaired*, Presented at the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. pg173-181
- MANN, S., BROOK, P. and PARTRIDGE, B (1999) *A rural network using existing electric fencing*, Presented at the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. pg183-187
- McQUEEN, M. and MANN,S. (1999) *Concise paper: The Changing Scene of Third Year Projects*. Presented at the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. pg318
- MANN,S. (Compiler)(1999) Proceedings of the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. ISBN 0-473-06113-9 320pp [Proceedings](#)
- MANN, S., BROOK, and FOGARTY, S.(1999) *Goals for supporting the education needs of the visually impaired with an integrated reading device*, Presented at Disability in Education: Maximising Everyone's Potential, University of Otago, Digital proceedings (10 pages)
- Brook, P., and Mann, S., (1999) The contending roles of research and information technology tools in tertiary education, Department of Education Research Series, University of Science, Malaysia, October 12.
- MANN, S. and BROWN, I. (1999) *Patterns of use of computer support for environmental accreditation in rural New Zealand*, International Symposium on Environmental Software Systems. Environmental Informatics Institute (EII) and the International Federation for Information Processing (IFIP). Held at University of Otago, August 29th-September 3rd 1999. Digital proceedings (13 pages) <http://isess.crle.uoguelph.ca/>
- BROOK, P., VIRTUE, A. and MANN, S. (2000) *Aberrant Behaviour* Proceedings of the 13th Annual Conference of the National Advisory Committee on Computing Qualifications. 30th June-3rd July 2000 pp29-38

- MANN, S, COWAN, K. (2000) *Degrees of Information Technology in New Zealand Vocational Institutions* Proceedings of the 13th Annual Conference of the National Advisory Committee on Computing Qualifications pp199-206. 30th June- 3rd July Te Papa, Wellington
- MANN, S. BUISSINK-SMITH, N. (2000) *What the Students Learn: Learning through Empowerment* Proceedings of the 13<sup>th</sup> Annual Conference of the National Advisory Committee on Computing Qualifications Te Papa, Wellington 30th June - 3rd July, pp213-220.
- MCQUEEN, M., MANN, S. *A Language Model based Optical Character Recogniser(OCR) for Reading Incidental Text* Proceedings of the 13th Annual Conference of the National Advisory Committee on Computing Qualifications 30th June - 3rd July, 2000 pp207-212
- BROOK, P. MANN, S. TROUNSON, G. (2000) *The Bionic Baby Grows Up* Concise Paper in the Proceedings of 13th Annual Conference of the National Advisory Committee on Computing Qualifications , Te Papa, Wellington 30th June - 3rd July 2000 pp421.
- MANN, S. MCGREGOR, G. (2000) *A Web-based Infrastructure Supporting Research at Otago Polytechnic* Concise Paper in the Proceedings of 13th Annual Conference of the National Advisory Committee on Computing Qualifications 30th June - 3rd July 2000 pp434
- MANN, S. BROOK, P. (2000) *Delivery of Courses with Remote Partner Institutions* Concise Paper in the Proceedings of 13th Annual Conference of the National Advisory Committee on Computing Qualifications Te Papa, Wellington pp436
- BROOK, P. MANN, S. DAVIES, P. (2000) *Electric Fence Progress* Proceedings of the 13th Annual Conference of the NACCQ pp422.
- MANN, S. SMITH, L.G. (2000) *E-business for added value on the farm* E-Farming in the High Country, Omarama Merino Forum, NZ Institute of Agricultural Science , Tara Hills AgResearch High Country Research Station, 5pp (online)
- MANN, S. MCGREGOR, G. (2000), *Hot News By Cold Fusion: A student contribution to the development of organisational research capacity"* Poster presentation: Association of Polytechnics New Zealand
- MANN,S. (2000) Ready to play your part? I am. Otago Daily Times 9/8/2001





MANN, S. (ed) Proceedings of the 14th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2001 Hamilton, New Zealand, ISBN 0-473-07726-4 464pg

STILL, G, MALA, S. MANN, S. and DEVJEE, F.H. (2001) *Centre for the Assessment of Prior Learning Interactive CD-ROM* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p462

MANN, S. (2001) *Art Deco Human Computer Interaction* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p442

MANN, S, SINGH-COSGRAVE, B. and SINCLAIR-FOX, C. (2001) *Building an IT Community: BITWEB* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p443

MANN, S, MCGREGOR, G. (2001) *Industrial IT Project.* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p444

MANN, S., BROOK, P. and DOONAN, A. (2001) *eFridge: Everyday Internet Appliance* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p445

MANN, S. and BROWN, I. (2001) *FarmCheck: Polytechnic partnership set help promote a third of NZ's exports* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p446

SHERRIFF, L., SHERRIFF, R., FORSCUTT, O., HO, S. and MANN, S. (2001) *Smart-top: Athlete Monitoring for High Impact Sport* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p457

SINCLAIR, P., PARTRIDGE, M. and MANN, S. (2001) Remote Server Administration via Cellphone. Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p459

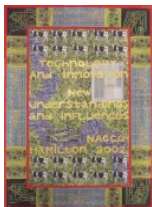
SINGH-COSGRAVE, B., SINCLAIR-FOX,C., MCLELLAN, G., MANN, S. and MCGREGOR, G. (2001) *Interactive CD for Teaching Development Based Subjects* Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p460

SMITH, L.G. and MANN, S. (2001) *Graduate Destinations*, Concise Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p461

BARCLAY, K., MANN, S., BROOK, P. and DOONAN, A. (2001) *Development and Testing of an Adaptive Computer Keyboard Interface* Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p13-22

OLIVER, M. and MANN, S. (2001) *Information Aggregation for Tailored Mobile Information* Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p101-108

SMITH, L.G., MANN, S. and BUISSINK-SMITH, N. (2001) *Crashing a Bus Full of Empowered Software Engineering Students*, Paper in the Proceedings of 14th Annual Conference of the National Advisory Committee on Computing Qualifications Napier, p131-139



MANN, S. (ed) Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand, ISBN 0-473-08747-2 501pg

MANN, S., MCGREGOR, G. (2002) Conversation as a Basis for Interactivity . Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 281-288

MANN, S., BROOK, P. HYND, R. (2002) ilnNtNeOgVrAaTtliOoNn. Proceedings of the 15th Annual Conference of the National Advisory

- Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 289 -294
- SMIT, R., MANN, S. (2002) Electronics by Otago. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 391-396
- SMITH L, MANN, S., HAMILTON, M. (2002) Playing the Game: A Model for Gameness in Interactive Game Based Learning. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 397-402
- BROOK, P., MANN, S. (2002) BallCam - The Day the World Spun. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 464
- GARRETT, P., ROSESCU, C., YOUNGMAN, D., MCCORMACK, J., MANN, S. (2002) Museum Object Acquisition System. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 471
- SIM, C., SINGH-COSGRAVE, B. WILLIAMS, D., BASKERVILLE, P., MANN,S. AND HYND, R. (2002) www.grabagrad.co.nz: A Website for Graduates. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 493
- SIM, C., BROOK, P., MANN,S., SMITH, J., YOUNGMAN, G., AND CORKERY, J. (2002) e-Fence. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 494
- SIM, C., BLAKELY, S, JOHNSTON, W. AND HYND, R. (2002) e-Signature. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 495
- BROPHY, P., MURPHY, P., MANN, S., AND SIM,C. (2002) Occupational Therapy Decision Simulation. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 496
- MANN, S., SCHMIDT, L. MAGUIRE, P., MCGREGOR, G. (2002) Novel Approach: Building a Research Culture Through a Book. Proceedings of

the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 488

MANN, S. (2002) The Knowledge Wave by Mistake. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 487

MANN, S., BROPHY, P., CEKOVIC, D., SMITH, L. (2002) Exploring a Support System for Degree Lecturers. Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand 486

MANN, S. (2002) Workshop on future of CITRUS Project. 15th Annual Conference of the National Advisory Committee on Computing Qualifications, 2nd - 5th July 2002 Hamilton, New Zealand

MANN, S. (2002) Innovation is what we are. Techfest Public Lecture, Hamilton July 3rd 2002

MANN, S. (2002) Innovation @ Work. International Science Festival Annual Public Lecture, Dunedin 1st July

WILLIAMSON, A., MANN, S. (2002) CITRUS: a working network of research and innovation. "Research that Works: Interacting to Innovate" APNZ Research Conference 26 and 27<sup>th</sup> September 2002, Palmerston North



MANN, S. (ed) Proceedings of the 16th Annual Conference of the National Advisory Committee on Computing Qualifications, 7th – 9th July 2003 Palmerston North, New Zealand, ISBN 0-473-09673-0 532pg

BREMER, D., and MANN, S. (2003) *Negotiated contract learning* Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p207 - 210

GARRETT, P., YOUNGMAN, D., McCORMACK, J. and MANN, S. (2003) *Characteristics of success – Virtually there* Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p269 - 271

MANN, S., DAVIES, C., and MCGREGOR, G. (2003) *The role of literacy in the IT curriculum* Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p351 - 354

SMITH, L. and MANN, S. (2003) *Assessment of ethical processes in computing education: Are we clean? How to tell?* Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p409 – 414

SMITH, L., MANN, S. and BUISSINK-SMITH, N. (2003) *A flexible database approach for regional heritage and tourism information management* Paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p415 - 418

SEWELL, A. and MANN, S. (2003) *Data modeling approaches: divergence in practice* Poster paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p502

SMIT, R. and MANN, S. (2003) *Weaving the fabric of IT degrees* Poster paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, p504

MANN, S., VAN DYK, J. and BROOK, P. *Art of Computers – Computers of Art* Poster paper in the Proceedings of 16th Annual Conference of the National Advisory Committee on Computing Qualifications Palmerston North, [p491](#)

MANN, S. and SMITH, L. (2004) 'A serious thing, no fun': A Model for Gameness in Interactive Game Based Learning. NZ Games Developers Conference Fuse 2004, King, S.A. (ed). University of Otago. June 26-29 2004. 127-133.



MANN, S. and CLEAR, T. (2004) *Proceedings 17th Annual NACCQ*, (Eds) Christchurch. July 6-9th July 2004. ISBN 0-476-00726-7

JORDAN, R., MANN, S. (2004) *Knightsmove*. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p293-296.

- MANN, S., LUO, L. BUISINK-SMITH, N. (2004) Dynamic visualisations as storytelling. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p357-364.
- CHURCHER, C., JOHNSTONE, D., HADEN, P. MANN, S. (2004) Johnnys Adventures. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Palmerston North. July 6-9th 2004. p484.
- ERKENS, B. and MANN, S. (2004) Beyond the listbox: the use of very rapid physical prototyping in software engineering. *17th Annual NACCQ 2004*, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p491.
- FOX, A-M., TAKAU, L., YUAN, S., HADEN, P. and MANN, S. (2004) Fish 'n clicks. *17th Annual NACCQ 2004*, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p492.
- OVERHOFF, R., LEES, H. , AHMED,S., SMITH, L. and MANN, S. (2004) School Connect. *17th Annual NACCQ 2004*, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p513.
- SMIT, R. and MANN, S. (2004) Developing systems for the remote control of an Airship. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p525.
- SMITH, L. and MANN, S. (2004) Museums and IT. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p527.
- TROUNSON, R. and MANN, S. (2004) "Sorry about this, I can't draw": The Role of Design in Computing Education. 17th Annual NACCQ 2004, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p533.
- WADE, D., ROGER, L. SEWELL, A. and MANN, S. (2004) Event Layout Design System . *17th Annual NACCQ 2004*, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p538.
- YOUNG, A. and MANN, S. (2004) Computers facing the wrong way: New labs one year on . *17th Annual NACCQ 2004*, Mann, S. and Clear, T. (eds). Christchurch. July 6-9th 2004. p540.



MANN, S. and CLEAR, T. (2005) *Proceedings 18th Annual NACCQ*, (Eds) Tauranga. July 10-13<sup>th</sup> July 2005. ISBN 0-473-10139-4

- MANN, S. and SMITH, L.G. (2005) A+, Guaranteed<sup>1</sup>: Insisting on best of practice within capstone projects *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p243-248
- MANN, S. and SMITH, L.G. (2005) Technical complexity of projects in software engineering *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p249-254
- SMITH, L.G and MANN, S. (2005) Probing the World of the Project Student *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p301-306
- SMITH, L.G and MANN, S. (2005) Probing Remote Projects: bringing their diaspora home *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p307-310
- ALLAN, L.G and MANN, S. (2005) The challenge of teaching the Japanese electrical engineering curriculum in English *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p340
- BENSON, A., RAO, S., MCLEAN, R., and MANN, S. (2005) Race car racing characteristics *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p341
- CAMERON, R, THOMPSON, R., HILLS, D, MCQUEEN, M, and MANN, S. (2005) Energy system wireless monitoring *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p348
- GOODSIR, K., DOUGLAS, A., HOLO, S., MANN, A., SMITH, L.G., SEWELL, A. and MANN S. (2005) SciCards *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p352
- MCBRATNEY, J., HUNT, J., MORTON, C., SEWELL, A., and MANN, S. (2005) Rest-Home Management System *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p364
- RICHARDS, T., WOOD, K., FAHEY, W., BARCLAY, K., HAY, C., MANN, S. (2005) Water Measurement Data Collection System *Proceedings 18th Annual NACCQ*, Mann, S. & Clear, T. (eds). Tauranga. July 10-13<sup>th</sup> July 2005. p369

MANN, S., RUSSELL, K, CROOK, M., WIKIARA, J, RICHARDS, T., CAMP, J., DICKSON, D., DAVIS-TE MAIRE, K., COOK, E., and LAWS, M. (2005) SimPā: A collaborative process for Kai Tahu game-based storytelling. Graphite 2005. Online.

TOLHURST, D. and MANN, S. (eds) (2006) Eighth Australasian Computing Education Conference (ACE2006), Hobart, Tasmania, Australia, January 2006 <http://crpit.com/Vol66.html>

MANN, S. (2006) Courage based research fun. Manukau Institute of Technology Seminar Series. 14 March 2006.

CROOK, M., J. CAMP, K. RUSSELL and S. MANN (2006). Telling the story of telling the story. 19th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.317

GASSON, J., P. BROOK, H. BALDWIN and S. MANN (2006). Real Computing at Year 13. 19th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.320

MANN, S., L. SMITH and P. BROOK (2006). Institutional history: eleven years of a degree in a timeline. 19th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.324

THOMPSON, M., T. S. M., P. HADEN and S. MANN (2006). Rugby Moves to 3D. 19th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington, New Zealand, NACCQ in cooperation with ACM SIGCSE.330



MANN, S. and Simon (eds) (2007) Eighth Australasian Computing Education Conference (ACE2007), *Conferences in*



*Research and Practice in Information Technology*, vol 66, Ballarat, Australia, January 2007 1-920-68246-5. 48.8% acceptance.  
<http://crpit.com/Vol66.html>

- MANN, S., SMITH, L. MULLER, L. (2007) New Zealand Sustainability in Computing Education Workshop National Advisory Committee on Computing Qualifications 8th July 2007, Nelson, New Zealand Full day research workshop <http://hyperdisc.unitec.ac.nz/naccq07/programme/workshops/index.html#sustainability>
- MANN, S., M. GOODWIN, et al. (2007). Poster: Works Just Like Clockwork: Model Making For Teaching Computing Concepts. 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE.
- JO BAGRIE, BEN BISHOP, BLAIR LUNDIN, SAMUEL MANN (2007) Clothing Suggestion Engine 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 261
- JOHN CHENG, SAMUEL MANN, CAROLYNE SMITH, JO BAGRIE (2007) A Lifetime of Stories ah, now that's an interesting picture, are you sitting comfortably there, it all started the year my father bought the bush block off the... 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 262
- PETER BROOK, HAYDEN CROFT, SAMUEL MANN (2007) Laser based line-out simulator  
20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE.265
- MURRAY DICK, SAMUEL MANN, JO BAGRIE (2007) It's Gaming Jim But Not As We Know It: Large Scale Interactive Gaming Platform 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 268
- GRANT HELM, STUART MATTHEWS, SHIMING SHEN, Kevin Barclay, Thomi Richards, Samuel Mann, Jo Bagrie (2007) FIRE: Adding educational value to "it was hot" 271
- CHRISTOPHER LEE, DAVID MCDONALD, IAN SIMPSON, THOMI RICHARDS, SAMUEL MANN, JO BAGRIE (2007) LABEL ME: Label Formatting Made Easy 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE 274

- JAYDEN LIPPERS, LARISSA MCDONALD, SAMUEL MANN, JO BAGRIE (2007) Let Us Manage Your Lettuce: A Networked Solution For Hydroponics 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 275
- SAMUEL MANN (2007) Computer:Art timeline shows nostalgia and continuing fears 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE.278
- JOHN UNG, CHRISSIE JACKSON, SAMUEL MANN, JO BAGRIE (2007) Conversation with Leonardo 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 283
- ALASTAIR NICHOLL, LIZ COUP, JANEY LABES, PATRICIA HADEN, SAMUEL MANN, JO BAGRIE (2007) MARINE QUEST: Environmental E-Learning for Primary Students 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson, New Zealand, NACCQ in cooperation with ACM SIGCSE. 287
- MANN, S., RUSSELL, K. (2007) The Virtual Marae: Iwi Research and Collaboration Centre for New Zealand Studies Seminar Series Birkbeck, University of London, <http://www.nzsa.co.uk/centrefornzstudies.htm> Thursday 18 October 2007 2 hour formal presentation
- MANN, S. (2007) Stories of Magic: Digital Interactive Storytelling Culture Lab, University of Newcastle, UK. 15th October 2007 <http://www.ncl.ac.uk/culturelab/events/item/stories-of-magic-digital-interactive-storytelling>
- MANN, S. (2007) Green IT Otago University IT Seminar Series Moot Court, 1st November 2007 <http://www.otago.ac.nz/its/help/seminars/archives.php?id=32>
- SHEPHARD K, SMITH N and MANN S (2008) Answering the Call: Otago Polytechnic's role in creating sustainable practitioners 31st Annual HERDSA Conference Rotorua, New Zealand (Abstract)
- MANN, S., SMITH, N, SHEPHARD K (2008) Understanding our intake: sustainability knowledge, skills and values of incoming students, The Eighth International Conference of the Australasian Campuses Towards Sustainability network Kā kaiārahi o te kaitiakitaka: Tertiary Education Institutions Leading for Sustainability. Canterbury University 1-3 October 2008

- MANN, S. (2008) Living Campus, *AAEE, 15th Biennial National Conference Australian Association for Environmental Education, Charles Darwin University*, 9-12th July.
- KER, P., MANN, S., HUGHES, A.. (2008) Otago Polytechnic's Sustainable Practitioner, *AAEE, 15th Biennial National Conference Australian Association for Environmental Education, Charles Darwin University*, 9-12th July.
- MANN,S. NOBLE,S. KER,P. RITCHIE,M. (2008) LivingCampus: a whole institution approach to learning for sustainability, *Australasian Campuses Towards Sustainability ACTS*, University of Canterbury and CPIT, Christchurch, 1-3 Oct
- MANN,S. , SHEPHARD, K. (2008) Understanding our intake: sustainability knowledge, skills and values of incoming students, *Australasian Campuses Towards Sustainability ACTS*, University of Canterbury and CPIT, Christchurch, 1-3 Oct
- MANN, S. (2008) Beyond Virtualisation: What's Next for IT Sustainability? 26th Tertiary IT Conference, University of Otago, 17-19 September,
- SHEPHARD, K., MANN, S., BUISSINK-SMITH, N., DEAKER,L. (2008) Exploring education for sustainable development, 'Spotlight on Tertiary Teaching and Learning: Colloquium for the Southern Region'
- Mann, S. (2008) Building Sustainability Curriculum and Pedagogy, UNESCO UNDESD National Forum: Navigating towards 'Sustainability 101'. Wellington November.
- TREVOR FARQUHARSON, GARETH DOREST, JUN CUI, SAMUEL MANN, PATRICIA HADEN (2009) A virtual ant farm. Poster paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, 152
- SAMUEL MANN, KATIE ELLWOOD (2009) Simple Pledge - Otago Polytechnic's journey towards sustainability, Poster paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, p159
- SAMUEL MANN, LESLEY SMITH (2009) eLiving Campus Poster paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, p158

- RV SIAMAK, JOHAN PEENS, MIKE GOODWIN, SAMUEL MANN, HAMISH SMITH (2009) Automating model plane design, Poster paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, p61
- ADON MOSKAL, SCOTT SIMISTER, SAMUEL MANN, LESLEY SMITH (2009) Flexibly healthy and safe, Poster paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, p163
- SAMUEL MANN, LESLEY SMITH, HAMISH SMITH (2009) Project Wiki, Snapshot paper in 22nd Annual Conference of the National Advisory Committee on Computing Qualifications, Napier, 10-13th July, 192-193
- MANN, S. (2009) Transactions between the History of Computers and its Visualisation. *Aotearoa New Zealand Association of Art Educators Conference 2009. Art Works - Mahi Toi. Scoping Visual Arts Education.* April 20-23 - Dunedin
- Mann, S. (2009) Sustainable practitioner in energy management. Keynote presentation Otago University Energy Research Centre Workshop. 8/9/9
- MANN, S. (2009) A whole of institution approach to education for sustainability, UNESCO World Conference on Education for Sustainable Development - Moving into the Second Half of the UN Decade. Selected Poster.
- MANN, S. (2009) The golden age of computing: a visual extravaganza. New Zealand Communication Association Conference, Dunedin 9-10<sup>th</sup> December, p20
- SHEPARD K. , MANN S. , SMITH N. and DEAKER L (2009) How much do we know about the sustainability values of students, before during and after tertiary education? 5th World Environmental Education Congress, May 10-14 Montreal.
- MANN, S., SMITH, L., LOVE, K. (2009) Talking the walk: the role of communication in the teaching of sustainable practitioners.. New Zealand Communication Association Conference, Dunedin 9-10<sup>th</sup> December, p19
- RUSSELL, K. AND S. MANN (2009). The Many Indigenous Bodies of Kai Tahu. Indigenous Bodies: Reviewing, Relocating, Reclaiming School of American Studies, University of East Anglia; Norwich. 28pp
- KEARINS, K. AND S. MANN (2010). Proposed Benchmarking Study of Sustainability in Tertiary Education in New Zealand. NZAAE Biennial

Conference “Taking the Next Steps – Te Ahu Whakamua”. Hawkes Bay, NZ: 49-50.

MANN, S. (2010) Designing for conscious human behaviours for eco-friendly interaction, Examining Appropriation, Re-use, and Maintenance for Sustainability, CHI Workshop Atlanta, GA, April 10<sup>th</sup>  
<http://jinah.people.si.umich.edu//chi2010/final/Mann.pdf>

## **Book**

---

HEWSON, D.J. and MANN, S. (1995) *North Otago Sustainable Land Management Guidelines*, NOSLM Group and Otago Regional Council, ISBN 908922-24-8.

MANN, S. and ELLEWOOD, K. (2010) *A Simple Pledge: Towards sustainable practice*, Otago Polytechnic 36pp

MANN, S. (in press) *Preparing the Sustainable Practitioner: Every academic's guide to education for sustainability* (in press for NZCER)

MANN, S. (in prep) *Sustainable lens: diagrams of sustainability*.

## **Thesis**

---

MANN, S. (1998) *Spatial Process Modelling for Regional Environmental Decision Making*, Unpublished PhD Thesis, University of Otago, New Zealand.

MANN, S. (1993) *Ecological Modelling of Land Degradation in Central Otago*, Unpublished Masters Thesis (Geography), University of Otago, New Zealand

MANN, S. (1991) *A Model of Regeneration for Remnant Native Forests*, Unpublished Honours dissertation (Geography), University of Otago, New Zealand

## **Significant Reports**

---

- MANN, S. (1991) *Assessment of environmental monitoring programme within the Rabbit and Land Management Programme*, Otago Regional Council and Ministry of Agriculture.
- MANN, S. (1993) *Biosecurities Noxious Plants survey and statistical review* Otago Regional Council (unpublished).
- MANN, S. (1994) *Review of the Condition and Trend; A Grasslands Management Trajectory Model*. Otago Regional Council (unpublished).
- MANN, S. (1994) *Lessons in the establishment of a monitoring project*, Otago Regional Council (unpublished).
- MANN, S. (1994) *Considerations in the establishment of a Pest Monitoring Project*, Otago Regional Council (unpublished).
- MANN, S. (1994) *Database and Statistics for North Otago downlands direct drilling project*, Otago Regional Council (unpublished).
- MANN, S. (1994) *The value of modelling approaches in resource management*, Public Lecture Series Otago Regional Council.
- MANN, S. (1994) *Project introduction and methods for Pest Satellite project*, Otago Regional Council (unpublished).
- MANN, S. (1995) *Aerial Video Survey potential for Council functions in Central Otago*, Otago Regional Council (unpublished).
- MANN, S. (1995) *Land Health Index: Report on use of satellite imagery, ground based monitoring and spatial analysis for Central Otago*. Otago Regional Council (unpublished).
- BENWELL, G.L., and MANN, S. (1995) *Advances in Spatial Information Technology - Implications for the Telecommunications Industry*. Report submitted to Telecom NZ, Spatial Information Research Centre, University of Otago, 210 pp.
- Mann, S., Lautensauch, S. and M<sup>o</sup>Millian, J. (1996) *An Essential Suite: Methodology, Results and Analysis of a Report on a survey of PhD candidates*. Report for the Board of Graduate Studies. Otago University.
- MANN S., ISRAEL, S.I., HARRIS, M.J., MORGAN, R.K. and BENWELL, G.L (1996) *Measurement of percentage bareground for the Canterbury Region: a review of the best means of assessment with particular reference to sloping lands*. Contract for Canterbury Regional Council (unpublished) 97 pp.

- MANN, S. (1996) *Glenshee Vegetation Analysis*, Otago Regional Council (unpublished) 80pp.
- MANN, S. (1997) Topoclimate South Database Prototype, Agresearch (software)
- MANN, S. (1999) On-line marking system (Internet-based assessment system used throughout the Commerce Department, OP)
- MANN, S. (1999) Electronic course evaluation system (Internet-based course evaluation and feedback system used throughout the Commerce Department, OP) (<http://gavin.tekotago.ac.nz/cfdocs/commerce>)
- MANN, S. (2000) Compilation of '*Condition and Trend*' monitoring data Otago Regional Council (unpublished).
- MANN, S. (2000). ENVIRO-AG: Software for Environmental Accreditation, Otago Regional Council and NOSLaM) (Software)
- MANN, S. (2001) FARMCHECK, Module Two of "MARKET FOCUSED", Dairy Board, (Environmental Accreditation Software)
- WILLIAMSON, A., MANN, S. (2001) CITRUS: Centre for Information Technology Research: Centre of Research Excellence Application. Otago Polytechnic and NACCQ
- MANN,S. (2004) Annual review B.Information and Communication . Chair of Panel, Universal College of Learning. June 2004.
- MANN, S. (2004) Getting Started in Research (full day), ITPNZ Research Colloquium. Workshop Leader. Hamilton. October 2004.
- MANN, S. (2004) Managing Research in Polytechnics (full day), ITPNZ Research Colloquium. Workshop Leader. Hamilton. October 2004.
- MANN, S. (2005) Developing an Australasian Computer Education community of practice, Workshop Leader, Australian Computer Education Conference, Newcastle, NSW, January 2005
- MANN, S., SMITH, L. (2007) New Zealand Computing Statement on Computing Education for Sustainability National Advisory Committee on Computing Qualifications
- MANN, S., KEARINS, K. (2009) Submission to Tertiary Education Strategy on behalf of STENZ

MANN, S. (2009) Submission on Professional Knowledge Curriculum for NZ Computing Professionals, NZCS

### **Current and Recent Committees and Professional Activities**

---

2009 - current	Chair Sustainable Tertiary Education New Zealand (STENZ is a pivotal initiative within the NZDESD programme of activities. STENZ is supported by SANZ and the New Zealand National Commission for UNESCO).
2009	Chair Otago Branch NZ Computer Society
2009	Chair ACM SIGCSE Working Group Computing Sustainability
2008	Editor Proceedings of the 21st Annual Conference of the National Advisory Committee on Computing Qualifications, Napier.
2008	United Nations Decade of Education for Sustainable Development New Zealand Working Group on Tertiary Education for Sustainability (Chair)
2008 - current	Editorial Board International Journal of Sustainable Society
2008 - 2009	Made in Otago Committee
2008	Programme Committee 'Spotlight on Tertiary Teaching and Learning: Colloquium for the Southern Region'
2008	Chair ACM SIGCSE Working Group Computing Sustainability
2008	Computerworld Excellence Awards Judging Panel
2008	Chair Doctoral Consortium Hearttech
2008	Editor Proceedings of the 20th Annual Conference of the National Advisory Committee on Computing Qualifications, Auckland 2007
2008	ACM SIGCSE Chair Panel Computing Education for Sustainability
2007 - 2009	Deputy Chair Otago Branch NZ Computer Society
2007- current	Otago Polytechnic Sustainable Management Committee
2007- 2008	Otago Prototyping Facility Steering Committee
2007	Editor Proceedings of the 19th Annual Conference of the National Advisory Committee on Computing Qualifications, Nelson 2007
2006 - current	Otago Polytechnic Research Committee, Research Grants Committee, Travelling Scholars Committee
2006	Chair Tertiary Accord of New Zealand ICT Cluster
2006	Otago Polytechnic PBRF Internal Panel
2005	ACM Working Group on Ontology and Synthesis of Computing Disciplines



2006	Editor Proceedings of the 18th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington, July 2006
2006/7	Editor Australian Computing Education Conference
2005	Reviewer Australian Computing Education Conference.
2005	Editor Proceedings of the 17th Annual Conference of the National Advisory Committee on Computing Qualifications, Christchurch July 2004. ISBN 0-473-10139-4
2004 – current	External Advisor, Bachelor of Information and Communications Technology, UCOL, Palmerston North.
2004	Programme Committee Australian Computing Education Conference
2004 – current	Otago Polytechnic Academic Board
2003 – current	Editorial Board: Bulletin of Applied Computing and Information Technology
2003 – 2006	Editorial Committee Junctures: Journal of Thematic Dialogue
2003 – current	External examiner Unitec New Zealand School of Computing and IT Masters
2003	Editor Proceedings of the 16th Annual Conference of the National Advisory Committee on Computing Qualifications, Palmerston North July 2003. ISBN 0-473-09673-0 532pg
2002 – 2003	Otago Polytechnic Faculty of Art and Technology Faculty Board
2001 – 2003	Otago Polytechnic Faculty of Art and Technology Research and Development Committee
2002 – current	Executive Committee of National Advisory Committee on Computing Qualifications
2002	Chair Otago Polytechnic Faculty of Art and Technology Research and Scholarship Committee
2001	Editor Proceedings of the 15th Annual Conference of the National Advisory Committee on Computing Qualifications, Hamilton July 2002. ISBN 0-473-08747-2 501pp
2000 – 2008	Otago Polytechnic Academic Approvals Committee
2001 – current	Chair Steering Committee for New Zealand Centre for Information Technology Research (now Trust)
1999 – 2003	Chair National Advisory Committee on Computing Qualifications Academic Quality and Support (budget \$170,000)
1998 – 2004	Associate Editor New Zealand Journal of Applied Computing and Information Technology
2001	Invited by Prime Minister Helen Clark to attend NZ Government Strategy Conference “Catching the Knowledge Wave”, August 2001 Auckland
2001	Association of Polytechnics NZ Research Forum
2001	Editor Proceedings of the 14th Annual Conference of the National Advisory Committee on Computing

	Qualifications, Napier July 2001. ISBN 0-473-07726-4 464pp
2001	Academic Conference Convener for the NACCQ 14th Annual Conference (Napier, July 2001, 49% paper acceptance)
2000 – 2002	Otago Polytechnic Academic Board
2000	Invited to attend NZ Government's Ecommerce Conference on developing Ecommerce Strategy, October 2001, Auckland
2000	National Forum for Bachelor of Information Technology Institutions
2000	Academic Conference Convener for the NACCQ 13th Annual Conference (Wellington, July 2000)
2000	Editor Proceedings of the 13th Annual Conference of the National Advisory Committee on Computing Qualifications, Wellington July 2000. ISBN 0-473-06915- 6 450pp
2000 – 2001	Tertiary Accord of New Zealand, Research Forum
1999 – 2000	Otago Polytechnic Chief Executive's Advisory Group
1999 – 2000	Otago Polytechnic Academic Quality Working Sub- Group
1999	Academic Conference Convener for the NACCQ 12th Annual Conference (July 99) and Editor Proceedings of the 12th Annual Conference of the National Advisory Committee on Computing Qualifications, Dunedin 4-8 July. ISBN 0-473-06113-9 320pp
1999	Christchurch Polytechnic External Moderator
1999	Developed Departmental Ethics Procedures
1999 – current	External examiner Otago University Geography Dept Masters
1999	Organised and attended a week long JADE course
1998	Christchurch Polytechnic. External Examiner for Third Year Collaborative Education Projects
1998 – 2002	Working Group developing Masters in Information Technology
1998 – 2000	Otago Polytechnic Courses Committee
1998 – 2000	Commerce Department Board of Studies, Otago Polytechnic
1998	Reviewer for New Zealand Journal of Applied Computing and Information Technology
1998-1999	National Advisory Committee on Computing Qualifications. Professional Development Working Group
1996-	North Otago Land Sustainability Group Technical Advisory Committee.
1996	Board of Graduate Studies, Working Party on Post Graduate Resourcing. Otago University.
1996-97	2nd Annual Conference on GeoComputation incorporating the Spatial Information Research Centre's 9th Annual Colloquium, organising committee.

## **Professional Organisations**

---

Member New Zealand Association of Resource Management  
Member Modelling and Simulation Society of Australasia  
Member ACM  
Member NZ Computer Society

## **Recreational Interests**

---

Competitive swimming, kite flying, sailing, drama, diving (PADI), graphic design, web design, open water swimming.

## **PhD Abstract 1997**

---

### **Regional Environmental Decision-Making with Spatial Process Modelling**

The aim of this thesis is to develop and test criteria for constructing useful decision support tools for improving Regional Environmental Decision-Making (REDM). This thesis contributes to the body of knowledge in developing practice to assist in an area of established need. The thesis first describes the difficulties inherent in supporting a class of environmental problems, which are those problems involved in Regional Environmental Decision-Making. Such decision-making is shown to be performing poorly when assessed against decision-making standards. A decision building environment is proposed and a set of conceptual criteria are derived that, it is argued, will lead to improvements in REDM. These criteria are corroborated with the results of a survey of New Zealand REDM practitioners. Existing support systems are examined and it is shown that a major obstacle is the lack of a system that integrates components of Geographic Information Systems (GIS) with process modelling functions, particularly those used in Visual Interactive Modelling Systems (VIMS). A new approach, Spatial Process Modelling is proposed that combine GIS with VIMS. Detailed design specifications are developed that are then used to develop a prototype system. The system is described and benefits and limitations discussed. The system is tested by practitioners, who, after using the system to complete some REDM tasks, found that the system would be useful for REDM. The thesis concludes that development of computer support will result in measurable improvement in regional environmental decision-making. This computer support should be based on the decision building environment described by the conceptual criteria.

## **MSc Abstract 1993**

---

## **The Integration of Ecological, Neural and Spatial Modelling for Monitoring and Prediction for Semi-Arid Landscapes**

Land degradation in the southern central part of the South Island, New Zealand is a pressing environmental issue. There is a requirement for a method encompassing integrated monitoring and modelling. This paper describes an approach that combines ecological modelling using regression methods and neural networks with spatial information including remotely sensed information. Regression techniques are initially used for modelling with result of  $r^2 = 0.68$ . Prompted by some residual concerns about disaggregation, a series of neural networks were designed. The result of these latter tests produced  $r^2 = 0.86$ . A study was undertaken to analyse these results and to use the models for extrapolation. The models were useful for the prediction and simulation of ground based land monitoring data and successfully predicted the condition of a large area of land when applied to a spatial dataset.