

Information Science

Published in 2001

Chapter in Book - Research

Holt, A., & Gillies, J. E-health and on-line medical transactions. In *Internet Management Issues: A Global Perspective*. J. Hayes (Ed.) Idea Group Publishing, Hershey, P.A., USA (2001) 279-296

Kasabov, N. K. Brain-like functions in evolving connectionist systems for on-line, knowledge-based learning. In *What Should be Computed to Understand and Model Brain Function?* T. Kitamura (Ed.) World Scientific, Singapore (2001) 1-36

MacDonell, S. G., & Gray, A. R. Software engineering management. In *Guide to the Software Engineering Body of Knowledge (SWEBOK)*. P. Bourque and R. Dupuis (Eds.) IEEE Computer Society Software Engineering Co-ordinating Committee, Los Alamitos, CA, USA (2001) 121-135

Nowostawski, M., Purvis, M. K., & Cranefield, S. J. An architectural approach to messaging in multi-agent systems. In *Infrastructure for Agents, Multi-agent Systems and Scalable Multi-agent Systems*. T. Wagner and O.F. Rana (Eds.) Springer-Verlag, Berlin, Germany (2001) 105-110

Journal – Research Article

Brebner, C., Jones, R., Krisjanous, J., Marshall, W., Parry, G., & Holt, A. Electronic medical consultation: A New Zealand perspective. *International Journal of Medical Internet Research* 3(1):1-13 (2001)

Choi, R., Barnes, T. H., Sandle, W., Woolhouse, A. D., & McKinnie, I. T. Observation of a thermal phase-grating contribution to diffraction in erythrosin-doped gelatin films. *Optics Communications* 186:43-50 (2001)

Cranefield, S. J., & Purvis, M. K. Integrating environmental information: Incorporating metadata in a distributed information

systems architecture. *Advances in Environmental Research* 5:319-325 (2001)

Kasabov, N. K. Artificial neural networks for intelligent information processing. *Transactions of Chemical Engineering* June:27-28 (2001)

Kasabov, N. K. Evolving fuzzy neural networks for supervised/unsupervised online, knowledge-based learning. *IEEE Transactions on Systems, Man and Cybernetics, Part B: Cybernetics* 31(6):902-918 (2001)

Kitchenham, B. A., Pickard, L. M., MacDonell, S. G., & Shepperd, M. J. What accuracy statistics really measure. *IEEE Proceedings - Software Engineering* 148(3):81-85 (2001)

MacDonell, S. G., & Gray, A. R. Software forensics applied to the task of discriminating between program authors. *Systems Research and Information Systems* 10:113-127 (2001)

Marriott, A., Devlin, N. J., & Benwell, G. L. The delivery of orthodontic care in New Zealand. Part 1: Analysis of a census of orthodontists. *New Zealand Dental Journal* 97:44-48 (2001)

Parry, D., Holt, A., & Gillies, J. Using the internet to teach health informatics: A case study. *International Journal of Medical Internet Research* 3(3):1-26 (2001)

Purvis, M. K., Hwang, P., Purvis, M. A., Madhavji, N., & Cranefield, S. J. A practical look at software internationalisation. *Journal of Integrated Design and Process Science* 5(3):95-106 (2001)

Purvis, M. K., Zhou, Q., Cranefield, S. J., Ward, R. W., Raykov, R., & Jessberger, D. Spatial information modelling and analysis in a distributed environment. *Environmental Modelling and Software* 16(5):439-445 (2001)

Strike, K., El Emam, K., & Madhavji, N. Software cost estimation with incomplete data. *IEEE Transactions on Software Engineering* 27(10):890-908 (2001)

Tasse, J., & Madhavji, N. View-based process elicitation: A user's perspective. *Software Process Improvement and Practice* 6:125-139 (2001)

Whigham, P. A., & Recknagel, F. Predicting chlorophyll-a in freshwater lakes by hybridising process-based models and genetic algorithms. *Ecological Modelling* 146:243-251 (2001)

Whigham, P. A., & Young, W. J. Modelling river and floodplain interactions for ecological response. *Mathematical and Computer Modelling* 33:635-647 (2001)

Whigham, P., & Crapper, P. F. Modelling rainfall-runoff using genetic programming. *Mathematical and Computer Modelling* 33(6-7):707-721 (2001)

Whigham, P., & Recknagel, F. An inductive approach to ecological time series modelling by evolutionary computation. *Journal of Ecological Modelling* 146(1-3):275-287 (2001)

Wolfe, H. B. Using Computer Data Encryption Techniques in Your Practice. *Technology Law Forum* 1(6):77-80 (2001)

Wolfe, H. B. Using Computer Forensic Techniques in Your Practice. *Technology Law Forum* 1(4):45-47 (2001)

Book Reviews

Whigham, P. A. "Evolutionary Design by Computers" by P.J. Bentley (Ed). In *Journal of Genetic Programming and Evolvable Machines. Volume 2* 79-84 (2001)

Website Journals

Cranefield, S. J. Networked knowledge representative and exchange using UML and RDF. *Journal of Digital Information Vol* 1:8, (2001).

<http://jodi.ecs.soton.ac.uk/Articles/v01/i08/Cranefield/>

Journal Articles - Non Refereed

Huang, Z., Sun, C., Purvis, M. K., & Cranefield, S. J. View-based consistency and false sharing effect in distributed shared memory. *Operating Systems Review* 35(2):51-60 (2001)

Wolfe, H. B. Electronic Evidence Gathering. *Law Talk* 14-16 (2001). Wellington, New Zealand

Conference Contribution – Full paper in published conference proceedings

Abdulla, W. H., & Kasabov, N. K. Improving speech recognition performance through gender separation. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 218-222

Aldridge, C. H. A rough set based methodology for geographic knowledge discovery. In *Proceedings of the 6th International Conference on GeoComputation*. D. Pullar (Ed.) University of Queensland, Australia (2001) 1-19

Aldridge, C. H. Geographic knowledge: Bringing geographers to their sensors. In *Proceedings of the 13th Annual Colloquium of the Spatial Information Research Centre*. P. A. Whigham (Ed.) University of Otago Printery, Dunedin (2001) 195-210

Benwell, G. L. The digital divide - The technical and social consequences in the information age. In *Proceedings of the Otago University of Commerce International Symposium*. Otago University, Japan (2001)

Cranefield, S. J., Haustein, S., & Purvis, M. K. UML-based ontology modelling for software agents. In *Proceedings of the Workshop on Ontologies in Agent Systems, 5th International Conference on*

Autonomous Agents. 2001. CEUR-WS.org, Montreal (2001) 21-28. <http://CEUR-WS.org/Vol-52/oas01-cranefield-1.pdf>

Cranefield, S. J., & Purvis, M. K. Generating ontology-specific content languages. In *Proceedings of the Workshop on Ontologies in Agent Systems, 5th International Conference on Autonomous Agents 2001*. CEUR, Montreal (2001) 29-35. <http://CEUR-WS.org/Vol-52/oas01-cranefield-2.pdf>

Deng, D. Mining visual concepts for image retrieval: A case study. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems (ANNES)*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 169-174

Deng, D., & Kasabov, N. K. Evolving localised learning model for on-line image colour quantisation. In *International Conference on Image Processing (ICIP 2001)*. IEEE Press (2001) 1:906-909

Deng, D., & Kasabov, N. K. On-line pattern analysis by evolving self-organizing maps. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 46-51

Futschik, M., & Kasabov, N. K. Evolving fuzzy neural networks for knowledge discovery from gene expression data - A case study. In *RECOMB' 2001 - Proceedings - Currents in Computational Molecular Biology 2001*. T. Lengauer and D. Sankoff (Eds.) Canada (2001) 175-178

Ghobakhlou, A., & Seesink, R. An interactive multi modal system for mobile robotic control. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 93-99

Holt, A. Understanding spatial complexities utilising similes and metaphors. In *6th*

International Conference on GeoComputation. D V Pullar (Ed.) University of Queensland, Brisbane, Australia (2001) CD Rom(e12):85-89

Huang, Z., Cranefield, S. J., Purvis, M. K., & Sun, C. View-based consistency and its implementation. In *Proceedings of the First IEEE/ACM International Symposium on Cluster Computing and the Grid (CCGrid 2001)*. IEEE Computer Society, Los Alamitos (2001) 74-81

Jones, I., Holt, A., Benwell, G. L., & Fryer, J. Predictive modelling of aboriginal artwork locations using case based reasoning. In *Sircumnavigation: Where have we been? Where are we going? The proceedings of the 13th Annual Colloquium of the Spatial Information Research Centre*. P.A. Whigham (Ed.) University of Otago Printery, Dunedin (2001) 147-154

Jones, I., & Richards, K. Spatial interpolation of minimum temperatures in Southland, New Zealand. In *Proceedings of the Thirteenth Annual Colloquium of the Spatial Information Research Centre*. P.A. Whigham (Ed.) Spatial Information Centre, University of Otago, Dunedin (2001) 155-161

Kasabov, N. K. Evolving connectionist systems, the brain and the genes. In *Proceedings of ICONIP 2001*. ICONIP, China (2001) 111-114

Kasabov, N. K., Futschik, M. E., & Middlemiss, M. J. Knowledge based neural networks for on-line and off-line modelling and rule extraction in bioinformatics. In *CGBI'2001 Proceedings of the Atlantic Symposium on Computational Biology, Genome Information Systems and Technology*. C. Wu, P. Wang and J. Wang (Eds.) Durham, USA (2001) (15-17 March 2001):240-244

Leichter, C., Cichocki, A., & Kasabov, N. K. Enhancing EFuNN classification of single trial EEG via A-Posteriori ICA 'Denoising'. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks*

and Expert Systems. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 100-105

Moore, A. B. (2001). An internet-based system for coastal metadata provision. *9th Annual Conference of Geographical Information Systems Research UK (GISRUK)*, (pp. 3). UK: University of Glamorgan.

Moore, A. B., Jones, A. R., Sims, P. C., & Blackwell, G. K. Intelligent metadata extraction for integrated coastal zone management. In *Proceedings of GeoComputation 2001*. D. Pullar (Ed.) University of Queensland, Brisbane, Australia (2001) 1-19

Moore, A., Jones, A. R., Sims, P. C., & Blackwell, G. K. Integrated coastal zone management's holistic agency: An ontology of geography and geocomputation. In *Sircumnavigation: Where have we been? Where are we going? The proceedings of the 13th Annual Colloquium of the Spatial Information Research Centre*. P. A. Whigham (Ed.) University of Otago Printery, Dunedin (2001) 211-221

Moore, A., Whigham, P., Aldridge, C. H., Holt, A., & Hodge, K. P. Rugby: (a) union of space and time. In *"Sircumnavigation: Where have we been? Where are we going?" The proceedings of the 13th Annual Colloquium of the Spatial Information Research Centre*. P.A. Whigham (Ed.) University of Otago Printery, Dunedin (2001) 1:183-194

Moyle, S. A., & Watts, M. The roof maintenance problem - a fuzzy expert system. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 213-217

Nowostawski, M., Bush, G., Purvis, M. K., & Cranefield, S. J. A multi-level approach and infrastructure for agent-oriented software development. In *Proceedings of the 2nd International Workshop on Infrastructure for Agents, MAS and Scalable MAS, 5th*

International Conference on Autonomous Agents. 2001. Montreal (2001) 1-8. http://www.umcs.maine.edu/~wagner/workshop/01_nowostawski_bush_purvis_et_al.pdf

Nowostawski, M., Cranefield, S. J. S., & Purvis, M. K. Simple semantic language - The abstract content language. In *Proceedings of the 2nd International Workshop of Central and Eastern Europe on Multi-Agent Systems (CEEMAS 2001)*. B. Dunin-Keplicz and E. Nawarecki (Eds.) Department of Computer Science, University of Mining and Metallurgy, Kraków, Poland (2001) 347-354

Nowostawski, M., Purvis, M. K., & Cranefield, S. J. A layered approach for modelling agent conversations. In *Proceedings of the 2nd International Workshop on Infrastructure for Agents, MAS, and Scalable MAS, 5th International Conference of Autonomous Agents. 2001*. Montreal (2001) 163-170. http://www.cs.cf.ac.uk/User/O.F.Rana/agents2001/papers/06_nowostawski_et_al.pdf

Nowostawski, M., Purvis, M. K., & Cranefield, S. J. KEA - Multi-level agent infrastructure. In *Proceedings of the 2nd International Workshop of Central and Eastern Europe on Multi-Agent Systems (CEEMAS 2001)*. B. Dunin-Keplicz and E. Nawarecki (Eds.) University of Mining and Metallurgy, Kraków, Poland (2001) 355-362

Nowostawski, M., Purvis, M. K., & Cranefield, S. J. Modelling and visualizing agent conversations. In *Proceedings of the 5th International Conference on Autonomous Agents*. J.P. Müller, E. Andre, S. Sen and C. Frasson (Eds.) ACM Press, New York (2001) 234-235

Purvis, M. K., Cranefield, S. J., Ward, R. W., Nowostawski, M., Carter, D., & Bush, G. A multi-agent system for the integration of distributed environmental information. In *Environmental Software Systems - Proceedings of the 4th International Symposium on Environmental Software Systems (ISESS'01)*. D.A. Swayne, R. Denzer and G. Schimak (Eds.) International

Federation for Information Processing,
Laxeburg, Austria (2001) 111-124

University of Otago Printery, Dunedin
(2001) 1:267-272

Purvis, M. K., Purvis, M. A., & Lemalu, S. A framework for distributed workflow systems. In *Proceedings of the Hawaii International Conference on System Sciences (HICSS-34)*. IEEE Computer Society Press, Los Alamitos, CA (2001) CD ROM

Whigham, P., & Keukelaar, J. K. Evolving structure, optimising content. In *Proceedings of the Congress on Evolutionary Computation*. Z. Zalzalá (Ed.) IEEE Press, USA (2001) 2:1228-1235

Song, Q., & Kasabov, N. K. ECM, A novel on-line, evolving clustering method and its applications. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 87-92

Wolfe, H. B. Electronic Evidence Gathering. In *Proceedings of the SEARCC Conference 2001*. Auckland, New Zealand (2001) 121-128

Villanueva, R., & Wong, W. B. L. Virtual tours in tourism: interaction issues. In *The Annual Conference of Computer-Human Interaction Special Interest Group of the Ergonomics Society of Australia*. Edith Cowan University, Perth, Australia (2001) 235-239

Wolfe, H. B. Electronic Evidence Gathering. In *Proceedings of IT Security*. Marcus Evans, Auckland, New Zealand (2001) 72-78

Wang, X. "On-line" time series prediction system - EFuNN. In *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems*. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 82-86

Wolfe, H. B. Electronic Evidence Gathering. In *Proceedings of the IT Security 2001 Conference*. IIR, Wellington, New Zealand (2001) 94-101

Watts, M., & Kasabov, N. K. Dynamic optimisation of evolving connectionist system training parameters by pseudo-evolution strategy. In *Proceedings of Congress on Evolutionary Computation*. IEEE Press, USA (2001) 1335-1342

Wolfe, H. B. Electronic Evidence Gathering. In *Proceedings of the Surveillance Expo Conference*. Detroit, Michigan (2001) 66-72

Watts, M., Major, L. L., Kasabov, N. K., & Tate, W. P. Neural network analysis of protein termination signal efficiency. In *Proceedings of International Conference on Neural Information Processing*. ICONIP, China (2001) 975-980

Wolfe, H. B. Gathering Evidence In a Computing Environment. In *Proceedings of the 2001 Informing Science Conference*. Krakow, Poland (2001) CD/ROM:Wolfe.pdf

Whigham, P. Exploring microclimate data - some issues. In *The 13th Annual Colloquium of the Spatial Information Research Centre*. P. Whigham (Ed.)

Wolfe, H. B. Introduction to Cryptography. In *Proceedings of the e-Crime Forum*. New Zealand Security Association, Auckland, New Zealand (2001) CD/ROM

Wong, W. B. L., & Blandford, A. Situation awareness and its implications for human-systems interaction. In *Proceedings of the Australian Conference on Computer-Human Interaction OzCHI 2001*. W. Smith, R. Thomas, & M. Apperley (Eds.) CHISIG, Ergonomics Society of Australia, Perth, Australia (2001) 181-186

Woodford, B. J. Comparative analysis of the EFuNN and the support vector machine models for the classification of horticulture data. In *Proceedings of the Fifth Biannual*

Conference on Artificial Neural Networks and Expert Systems. N. Kasabov and B. Woodford (Eds.) University of Otago Printery, Dunedin (2001) 70-75

Woodford, B. J., & Kasabov, N. K. A wavelet-based neural network classifier for temporal data. In *Proceedings of the 5th Australia-Japan Joint Workshop on Intelligent and Evolutionary Systems*. Whigham, Richards, McKay, Gen, Tujimura and Namatame (Eds.) Mitsuwa Publishing Co. Ltd, Japan (2001) 79-85

Woodford, B. J., & Kasabov, N. K. Ensembles of EFuNNs: An architecture for a multi module classifier. In *The Proceedings of FUZZ-IEEE 2001 - The 10th IEEE International Conference on Fuzzy Systems*. IEEE Press, Melbourne (2001) 441-445

Yu, B-H., Huang, Z., Cranefield, S. J., & Purvis, M. K. Design and implementation of a Java ATM API. In *Proceedings of the 4th Asia Pacific International Web Conference (APWeb 2001)*. M. Xu, Y. Wang and W. Zhao (Eds.) Publishing House of Electronics Industry, China (2001) 1-6

Conference Contribution – Edited volume of conference proceedings

Cranefield, S. J., Finin, T., & Willmott, S. (eds). *Proceedings of the Workshop on Ontologies in Agent Systems*. CEUR Workshop Proceedings <http://CEUR-WS.org/Vol-52>, Montreal (2001) 52 117p

Kasabov, N. K., & Woodford, B. J. (eds). *Proceedings of the Fifth Biannual Conference on Artificial Neural Networks and Expert Systems (ANNES'2001)*. University of Otago Printery, Dunedin, New Zealand (2001) 236p

Whigham, P. (ed). *"Sircumnavigation: Where have we been? Where are we going?" The proceedings of the 13th Annual Colloquium of the Spatial Information Research Centre*. University of Otago Printery, Dunedin (2001) 274p

Whigham, P., Mitsuo, G., Tujimura, Y., & Namatame, A. (eds). *The 5th Australia-Japan Joint Workshop on Intelligent and Evolutionary Systems*. Ashikaga Institute of Technology, Japan (2001) 176p

Web Site Conference Proceedings

Cranefield, S. J. UML and the Semantic Web. In *Proceedings of the International Semantic Web Working Symposium*. (2001) <http://www.semanticweb.org/SWWS/program/full/paper1.pdf>

Software

Cranefield, S. J. UML data binding for Java. <http://nzdis.otago.ac.nz/resources/allprojects.xml#uml-data-binding> (2001) . <http://nzdis.otago.ac.nz/resources/allprojects.xml#uml-data-binding>

Commissioned Report for External Body

Nind, D., Alexander, R. J., & Benwell, G. L. *Otago Regional Strategy for Economic Development*. Commissioned by Otago Regional Economic Development Committee. Dunedin. (2001) 50p

Sanderson, P. M., & Wong, W. B. L. *Final Report. Ergonomic consulting for SMCC facilities upgrade project: Task analysis input to control room redesign*. Commissioned by Manager, Scheme Operations, SMCC, Snowy Mountain Hydro Electric Authority, Cooma, NSW 2630. Swinburne University of Technology, Melbourne. (2001) 25p

Wolfe, H. B., Boyle, S., Crombie, G., & Waller, M. *Information Technology Control & Security Challenges*. Commissioned by Institute of Chartered Accountants of New Zealand. Wellington. (2001) 62p

Wong, W. B. L., & Sanderson, P. M. *Preliminary Report to the Snowy Mountain Hydro Electric Authority: NSW-Victoria System Separation Incident*. Commissioned by Snowy Mountain Hydro Electric Authority. Swinburne University of Technology, Melbourne. (2001) 25p
