

# List of Publications

by

## Prof.dr.ir. Jan van den Berg

- Publications categorized per publication outlet:
  - *My MSc Thesis* [1] and *PhD Thesis* [2]
  - *International Refereed Journal Papers* [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52]
  - *International Refereed Book Chapters* [53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67]
  - *International Refereed Conference Papers* [68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161]
  - *National Refereed Journal Papers and Book Chapters* [162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177]
  - *National Refereed Conference Papers* [178, 179, 180, 181, 182]
  - *Other (Scientific) Publications* [183, 184, 185, 186, 187, 188, 189, 190, 191, 107, 192, 193, 194, 195, 196, 197, 198]
  - *Technical Reports* [199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217]
  - *Syllabi/Text Books* [218, 219, 220, 221]
- Publications per scientific domain:
  - A majority of my publications cover a topic in the field of *Computational Intelligence* and/or *Data Analytics*.
  - Papers with a subject related to *Risk Management* include [13, 16, 17, 18, 56, 60, 77, 94, 100, 101, 110, 111, 114, 222, 118, 125, 126, 131, 134, 167, 171, 135, 223, 35, 38, 143, 41, 43, 146, 153, 155, 49, 67, 160, 161]
  - Papers with a subject related to *Cyber Security* include [23, 24, 25, 35, 59, 91, 111, 115, 116, 126, 130, 131, 134, 135, 136, 163, 164, 165, 166, 173, 188, 194, 140, 142, 44, 45, 46, 66, 150, 151, 152, 47, 154, 155, 48, 49, 50, 51, 156, 158, 159, 67, 160, 161]
- Nominations and awards:
  - My phd thesis [2] and papers [85, 90, 105, 130, 143] have been *nominated* for the *best phd*, respectively *best paper award*. From these, the paper [130] of the 12th Australian Information Warfare Conference (IWAR 2011) and [143] from the NATO IST-122 Cyber Security Science and Engineering Symposium won the best paper award indeed.

## References

- [1] Jan van den Berg. Variatieprincipes en Eindige Elementen Methodes in de Sterkteleer (Variational Principles and Finite Element Methods in the Mechanics of Materials). Master's thesis, Faculty of Mathematics, Delft University of Technology, August 1977.

- [2] J. van den Berg. *NEURAL RELAXATION DYNAMICS, Mathematics and Physics of Recurrent Neural Networks with Applications in the Field of Combinatorial Optimization*. PhD thesis, Erasmus University Rotterdam, April 1996. Nominated for the 1998 Christiaan Huygens Scientific Award.
- [3] J. van den Berg and J.C. Bioch. Some theorems concerning the free energy of (un)constrained stochastic Hopfield neural networks. In Paul Vitányi, editor, *Computational Learning Theory*, volume 904 of *Lecture Notes in Artificial Intelligence*, pages 298–312. Springer-Verlag, March 1995.
- [4] Willem-Max van den Bergh and Jan van den Berg. Competitive exception learning using fuzzy frequency distributions. *Neural Network World - International Journal on Neural and Mass-Parallel Computing and Information Systems*, 10(1-2):59–71, 2000.
- [5] A.M.G. Cornelissen, J. van den Berg, W.J. Koops, and M. Grossman. Assessment of the contribution of sustainability indicators to sustainable development: a novel approach using fuzzy set theory. *Agriculture, Ecosystems and Environment*, 86 (2):173–185, August 2001.
- [6] Jan van den Berg, Uzey Kaymak, and Willem-Max van den Bergh. Probabilistic reasoning in fuzzy rule-based systems. In Przemysław Grzegorzewski, Olgierd Hryniewicz, and María Á. Gil, editors, *Soft Methods in Probability, Statistics and Data Analysis*, a volume of *Advances in Soft Computing*, pages 189–196, Heidelberg, 2002. Physica Verlag. ISSN 1615-3871.
- [7] A.M.G. Cornelissen, J. van den Berg, W.J. Koops, and U. Kaymak. Elicitation of expert knowledge for fuzzy evaluation of agricultural production systems. *Agriculture, Ecosystems and Environment*, 95(1):1–18, 2003.
- [8] C. Christiaan van der Eijk, Jan Kors, Erik M. van Mulligen, and Jan van den Berg. Literature-based discovery using a spatial concept graph. *Journal of the American Society for Information Science and Technology*, 55(5):436–444, 2004.
- [9] Jan van den Berg, Uzey Kaymak, and Willem-Max van den Bergh. Financial markets analysis by using a probabilistic fuzzy modelling approach. *International Journal of Approximate Reasoning*, 35:291–305, 2004.
- [10] Jan van den Berg and Uzey Kaymak. On the notion of statistical fuzzy entropy. In M. López-Díaz, M.A. Gil, P. Grzegorzewski, O. Hryniewicz, and J. Lawry, editors, *Soft Methodology and Random Information Systems*, a volume of *Advances in Soft Computing*, pages 535–542. Physica Verlag, Heidelberg, 2004.
- [11] H. Azadi, M. Shahvali, and J. van den Berg. Sustainable rangeland management using fuzzy logic: A new paradigm for rangeland extensionists. *Journal of Extension Systems*, 22(2):27–38, December 2005.
- [12] R.H. Bosma, Le Thanh Phong, U. Kaymak, J. van den Berg, H.M. Udo, M.E.F. van Mensvoort, and Le Quang Tri. Assessing and modelling farmers’ decision making on integrating aquaculture into agriculture in the mekong delta. *Journal of Agriculture Sciences*, 53(3–4):281–300, 2006.
- [13] Heru Sataputera Na, Jan van den Berg, Lourenco Couto Miranda, and Marc Leipoldt. An econometric model to scale operational losses. *Journal of Operational Risk*, 1(2):11–31, Summer 2006.
- [14] N.J. van Eck, L. Waltman, J. van den Berg, and U. Kaymak. Visualizing the computational intelligence field. *IEEE Computational Intelligence Magazine*, 1(4):6–10, November 2006.
- [15] Hossein Azadi, Mansour Shahvali, Jan van den Berg, and Nezamodin Faghieh. Sustainable rangeland management using a multi-fuzzy model: How to deal with heterogeneous experts’ knowledge. *Journal of Environmental Management*, 83(2):236–249, April 2007.
- [16] Jos Vrancken, Jan van den Berg, and Michel dos Santos Soares. The human factor in system reliability, lessons learnt from the Maeslant storm surge barrier in the Netherlands. *International Journal of Critical Infrastructures*, 4(4):418–429, 2008.
- [17] Hossein Azadi, Jan van den Berg, and Mansour Shahvali. Sustainable rangeland management using fuzzy logic: A Case Study in Southwest Iran. *Agriculture, Ecosystems & Environment*, 131:193–200, 2009.
- [18] V.A.F. Dallagnol and J. van den Berg and L. Mous. Portfolio Management using Value at Risk, a Performance Comparison between Genetic Algorithms and Particle Swarm Optimization. *Journal of Intelligent Systems*, 24(7):766–792, 2009.

- [19] Peter den Brok, Ingrid Mulder, and Jan van den Berg. All the way to living independently: reflections on a design case. In K. Miesenberger, J. Klaus, W. Zagler, and A. Karshmer, editors, *Proceedings of 11th International Conference on Computers Helping People with Special Needs (ICCHP 2008)*, volume 5105 of *Lecture Notes in Computer Science*, pages 1001–1007. Physica Verlag, Linz, Austria, July 9–11 2008.
- [20] Vincent Wiegel and Jan van den Berg. Combining moral theory, modal logic and MAS to create well-behaving artificial agents. *International Journal of Social Robotics*, 1(3):233–242, June 2009. DOI = 10.1007/s12369-009-0023-5, URL = <http://www.springerlink.com/content/r0u3184667252670/fulltext.pdf>.
- [21] Hossein Azadi, Jan van den Berg, Peter Ho, and Gholamhossein Hosseininia. Sustainability in Rangeland Management: Introduction of Fuzzy Multi Objective Decision Making. *Current World Environment, International Journal of Environmental Sciences*, 4(1):19–32, June 2009.
- [22] Guido van Heck, Jan van den Berg, Mohsen Davarynejad, Ron van Duin, and Björn Roskott. Improving Inventory Management Performance using a Process-Oriented Measurement Framework. In Quintela Varajao, J.E., Cruz-Cunha M.M., Putnik, G.D., and Trigo, A, editors, *ENTERprise Information Systems, Part I*, volume 109 of *Communications in Computer and Information Science*, pages 279–286. Physica Verlag, Heidelberg, 2010.
- [23] M. Davarynejad and C. W. Ahn and J. Vrancken and J. van den Berg and C. A. Coello. Evolutionary Hidden Information Detection by Granulation-Based Fitness Approximation. *Applied Soft Computing*, 10(3):719–729, 2010. DOI:10.1016/j.asoc.2009.09.001.
- [24] Semir Daskapan, Jan van den Berg, and Amr Ali Eldin. Towards a Trustworthy Short-range Mobile Payment System. *International Journal for Information Technology and Management*, 9(3):317–336, 2010.
- [25] Semir Daskapan, Indira Nurtanti and Jan van den Berg. Trust Algorithms for Peer-to-Peer File Sharing. *International Journal of Internet Technology and Secured Transactions*, 2(1-2):174–200, 2010.
- [26] Nees-Jan van Eck, Ludo Waltman, Rommert Dekker, and Jan van den Berg. A Comparison of Two Techniques for Bibliometric Mapping: Multidimensional Scaling and VOS. *Journal of the American Society for Information Science and Technology*, 61(12):2405–2416, December 2010. DOI: 10.1002/asi.21421.
- [27] Roel H. Bosma, Uzay Kaymak, Jan van den Berg, Henk Udo, and Johan Verreth. Using Fuzzy Logic Modelling to Simulate Farmers’ Decision Making on Diversification and Integration in the Mekong Delta, Vietnam. *Soft Computing*, 15(2):295–310, February 2011. DOI 10.1007-s00500-010-0618-7.
- [28] Richard Heersmink, Jeroen van den Hoven, Nees Jan van Eck, and Jan van den Berg. Bibliometric mapping of computer and information ethics. *Ethics and Information Technology*, 2011. doi: 10.1007/s10676-011-9273-7 (open access).
- [29] Maarten Janssen, Jan van den Berg, Mohsen Davarynejad, and Vincent Marchau. Towards an EIS System for Measuring (Perceived) Landside Accessibility of Multi-Modal Airports. In M.M. Cruz-Cunha, João Varajão, Philip Powell, and Ricardo Martinho, editors, *ENTERprise Information Systems, Part II*, volume 220 of *Communications in Computer and Information Science*, pages 72–81. Physica Verlag, Heidelberg, 2011.
- [30] Roel H. Bosma, Jan van den Berg, Uzay Kaymak, Henk Udo, and Johan Verreth. A Generic Methodology for Developing Fuzzy Decision Models. *Expert Systems With Applications*, 39(1):1200–1210, January 2012. Elsevier: doi:10.1016/j.eswa.2011.07.126.
- [31] AliReza Soroush, Ardeshir Bahreininejad, and Jan van den Berg. A hybrid customer prediction system based on multiple forward stepwise logistic regression mode. *Intelligent Data Analysis*, 16(2):265–278, March 7 2012. DOI=10.3233/IDA-2012-0523.
- [32] Jan van den Berg, Maarten Janssen, Mohsen Davarynejad, and Vincent Marchau. Developing a System for Measuring Landside Accessibility Performance of Airports. *Information and Communication Technologies for the Advanced Enterprise*, 2:63–83, December 2012. ISSN: 1647-1407, available at <http://www.ict4ae.org/>.
- [33] Mohsen Davarynejad, Zary Forghany, and Jan van den Berg. Mass-dispersed Gravitational Search Algorithm for Gene Regulatory Network Model Parameter Identification. In Lam Thui Bui, Yew Soon Ong, Nguyen Xuan Hoai, Hisao Ischibuchi, and Ponnuthurai Nagarathman Sugantham, editors, *Simulated Evolution and Learning*, volume 7673 of *Lecture Notes in Computer Science*, pages 62–72. Springer, 2012.

- [34] Jan van den Berg, Uzay Kaymak, and Rui Jorge Almeida. Conditional Density Estimation Using Probabilistic Fuzzy Systems. *IEEE Transactions on Fuzzy Systems*, 21(5):869–882, December 21 2012. doi:10.1109/TFUZZ.2012.2235839.
- [35] Potchara Pruksasri, Jan van den Berg, Wout Hofman, and Semir Daskapan. Multi-Level Access Control in the Data Pipeline of the Internatioonal Supply Chain System. In Pang Chuan et al., editor, *Innovation in the High-Tech Economy*, Contributions to Economics, pages 79–90. Springer, 2013. ISBN: 978-3-642-41584-5.
- [36] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. Investigating teachers’ perception about the educational benefits of Web2.0-based personal learning environments. *eLearning Papers*, 35:1–13, November 2013. ISSN: 1887-1542.
- [37] Mohsen Davarynejad, Jan van den Berg, and Jafar Rezaei. Evaluating center-seeking and initialization bias: The case of particle swarm and gravitational search algorithms. *Information Sciences*, 278:802–821, September 10 2014.
- [38] Wolter Pieters, Zofia Lukszo, Dina Hadziosmanovic, and Jan van den Berg. Reconciling malicious and accidental risk in cyber security. *Journal of Internet Services and Information Security*, 4(2):4–26, May 2014.
- [39] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. A learning model for enhancing the student’s control in educational process using web2.0 personal learning environments. *British Journal of Educational Technology (BJET)*, pages 780–792, 2014. doi:10.1111/bjet.12170.
- [40] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. A pedagogy-driven framework for integrating web 2.0 tools into educational practices and building personal learning environments. *Journal of Literacy and Technology*, 15(2):54–79, June 2014. ISSN: 1535-0975.
- [41] Amr Ali-Eldin, Jan van den Berg, and Semir Daskapan. An adaptive trustworthiness modelling approach for ubiquitous software systems. *International Journal of Information Security and Privacy (IJISP)*, 8(4):44–60, 2014.
- [42] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. Facilitating student-driven construction of learning environments using Web 2.0 personal learning environments. *Computers & Education*, 81:235–246, February 2015. doi:10.1016/j.compedu.2014.10.012.
- [43] Amr Ali-Eldin, Jan van den Berg, and Hesham A. Ali. A risk evaluation approach for authorization decisions in social pervasive applications. *Computers and Electrical Engineering*, ?, 2016. Corrected Proof on line at Elsevier website on February 11 2016.
- [44] Potchara Pruksasri, Jan van den Berg, Wout Hofman, and Yao-Hua Tan. Enhancing process visibility of the supply chain ‘data pipeline’. *Transactions on Computer and Information Technology (ISSN 2286-9131)*, 10(1), May 2016.
- [45] Maarten Aertsen, Maciej Korczynski, Giovane C. M. Moura, Samaneh Tajalizadehkhoob, and Jan van den Berg. No domain left behind: is let’s encrypt democratizing encryption? *Computer Science: Cryptography and Security*, pages 1–6, 2016. Reference: arXiv:1612.03005.
- [46] Vitali Herrera-Semenets, Osvaldo Andrés Pérez-García, Raudel Hernández-León, Jan van den Berg, and Christian Doerr. A data reduction strategy and its application on scan and backscatter detection using rule-based classifiers. *Expert Systems With Applications*, ?, 2017. DOI: 10.1016/j.eswa.2017.11.041; available on line 21 November 2017.
- [47] Clara Maathuis, Wolter Pieters, and Jan van den Berg. Developing a computational ontology for cyber operations. *Journal of Information Warfare*, 17(3):33–52, 2018. ISSN 1445-3312 (print),ISSN 1445-3347.
- [48] Jan van den Berg. A Basic Set of Mental Models for Understanding and Dealing with the Cyber-security Challenges of Today. *Journal of Information Warfare*, 19(1):26–47, 2020. ISSN 1445-3347: <https://www.jinfowar.com/>.
- [49] Clara Maathuis, Wolter Pieters, and Jan van den Berg. Decision Support Model for Effects Estimation and Proportionality Assessment for Targeting in Cyber Operations. *Defence Technology*, 17(2):352–374, April 2021. Open Access: <https://doi.org/10.1016/j.dt.2020.04.007>.

- [50] Vitali Herrera-Semenets, Lázaro Bustio/Martínez, Raudel Hernández-León, and Jan van den Berg. A Multi-Measure Feature Selection Algorithm for Efficacious Intrusion Detection. *Knowledge Based Systems*, 227, September 2021. available via <https://doi.org/10.1016/j.knosys.2021.107264>.
- [51] Vitali Herrera-Semenets, Raudel Hernández-León, and Jan van den Berg. A Fast Instance Reduction Algorithm for Intrusion Detection Scenarios. *Computers and Electrical Engineering*, 101(107963), April 2022. <https://doi.org/10.1016/j.compeleceng.2022.107963>.
- [52] Lázaro Bustio-Martínez, L., Vitali Herrera-Semenets, Juan-Luis García-Mendoza, Miguel Ángel Álvarez-Carmona, Jorge Ángel González-Ordiano, Luis Zúniga-Morales, José Emilio Quiróz-Ibarra, Pedro Antonio Santander-Molina, and Jan van den Berg. Uncovering phishing attacks using principles of persuasion analysis. *Journal of Network and Computer Applications*, 230(103964), October 2024. <https://doi.org/10.1016/j.jnca.2024.103964>.
- [53] J. van den Berg and J.C. Bioch. On the (Free) Energy of Hopfield Networks. In S. Cho J.H. Oh, C. Kwon, editor, *Neural Networks: The Statistical Mechanics Perspective*, volume 1, pages 233–244, Singapore, February 1995. World Scientific, Progress in Neural Processing.
- [54] J. van den Berg. The Most General Framework of Continuous Hopfield Neural Networks. In *Neural Networks for Identification, Control, Robotics, and Signal/Image Processing*, pages 92–100. IEEE Computer Society Press, August 1996.
- [55] J. van den Berg and J. Geselschap. A Non-equidistant Elastic Net Algorithm. In S.W. Ellacott, J.C. Mason, and I.J. Anderson, editors, *Mathematics of Neural Networks: Models, Algorithms and Applications*, pages 101–106, Boston, 1997. Kluwer Academic Operations Research/Computer Science Interfaces series.
- [56] Roger Tan, Jan van den Berg, and Willem-Max van den Berg. Credit rating classification using self-organizing maps. In Kate Smith and Jatinder (Jeet) Gupta, editors, *Neural Networks in Business: Techniques and Applications*, pages 140–153, Hershey, Pennsylvania, USA, January 2002. Idea Group Publishing.
- [57] Jan van den Berg. Fuzzy methodologies for evaluating sustainable development. In G.O.S. Ekhaguere, editor, *Contemporary Applications of the Mathematical and Computer Sciences to Development Problems*, volume 1 of *Publications of the ICMCS*, pages 91–116. Lagos, Nigeria, August 2004. (ISBN 978-37246-8-1).
- [58] Jan van den Berg. Computational Intelligence Techniques and their Underlying Dilemmas. In G.O.S. Ekhaguere, C.K. Ayo, and M.B. Olorunsaiye, editors, *New Trends in the Mathematical and Computer Sciences*, volume 3 of *Publications of the ICMCS*, pages 53–113. Lagos, Nigeria, 2006-2007. ISBN: 978-37246-2-2.
- [59] Amr Ali Eldin, Semir Daskapan, and Jan van den Berg. Privacy Automation in Context-aware Services. In Dragan Stojanovic, editor, *Context-Aware Mobile and Ubiquitous Computing for Enhanced Usability: Adaptive Technologies and Applications*, chapter XIII, pages 295–309. IGI Global, Hershey, PA 17033, USA, 2009. URL of the book: <http://www.igi-global.com/downloads/ebook/locked/Stojanovic33229.pdf>.
- [60] Jan van den Berg, Heru Sataputera Na, Lourenco Couto Miranda, and Marc Leipoldt. Data scaling for modeling operational risk. In Jürgen H.M. van Grinsven, editor, *Risk Management in Financial Institutions, Formulating Value Propositions*, pages 59–66. IOS Press, January 2010. ISBN 978-1-60750-087-2.
- [61] Jan van den Berg, Guido van Heck, Mohsen Davarynejad, and Ron van Duin. Inventory Management, a Decision Support Framework to Improve Operational Performance. In João Eduardo Varajão, Maria Manuela Cruz-Cunha, and António Trigo, editors, *Organizational Integration of Enterprise Systems and Resources: Advancements and Applications*, chapter 15, pages 268–288. IGI Global, Hershey, PA 17033, USA, 2012. DOI: 10.4018/978-1-4666-1764-3.ch015.
- [62] Mohsen Davarynejad, Jos Vrancken, Jan van den Berg, and Carlos A. Coello Coello. A fitness granulation approach for large-scale mechanical optimization problems. In Zbigniew Michalewicz et al., editor, *Variants of Evolutionary Algorithms for Real-World Applications, part 3*, pages 245–280. Springer Verlag, 2012. available at <http://www.springerlink.com/content/n8045105u9721900/>.
- [63] Jan van den Berg. In Tineke Egyedi and Donna Mehos, editors, *Inverse Infrastructures: Disrupting Networks from Below*, chapter 2: Inverse Infrastructures at the Edge of Order and Chaos, an Analytic Framework, pages 17–37. Edward Elgar, June 2012. ISBN: 9781849803014.

- [64] Clara Maathuis, Wolter Pieters, and Jan van den Berg. Cyber weapons: a profiling framework. In , editor, *Proceedings of the 1st International Conference on Cyber Conflict (CyCon U.S.): Protecting the Future*, pages 1–8. IEEE Computer Society, Washington, USA, October 21-23 2016. DOI:10.1109/CYCONUS.2016.7836621.
- [65] Rhythima Shinde, Bramka Arga, Paraskevi Kokosia, and Jan van den Berg. Data mining algorithms for improving efficiency of governance in dynamic social systems: Case study of indian caste & tribe reservations. In Prashant Prawar et al., editor, *Proceedings of the International Conference on Advanced Technologies for Social Application (Techno-Societal 2016)*. Springer Verlag, Maharashtra, India, December 20-21 2016. ISBN: 978-3-319-53556-2.
- [66] Jan van den Berg. Cyber Security for Everyone. In Stefanie Frey and Michael Bartsch, editors, *Cyber Security Best Practices*, pages 571–583. Springer Vieweg, Wiesbaden, 2018. DOI: [https://doi.org/10.1007/978-3-658-21655-9\\_40](https://doi.org/10.1007/978-3-658-21655-9_40).
- [67] Jan van den Berg. Present-day Cybersecurity: Actual Challenges and Solution Directions. In Mamata Rath and Tusharkanta Samal, editors, *Key Issues in Network Protocols and Security (working title)*, pages 1–21. IntechOpen, London, UK, November 2024. Prepublication available at <https://www.intechopen.com/online-first/1206210>.
- [68] J. van den Berg and J.C. Bioch. Constrained optimization with the Hopfield-Lagrange model. In *Proceedings of the 14th IMACS World Congress*, volume 1, pages 470–473, Atlanta, GA 30332 USA, July 1994.
- [69] J. van den Berg and J.C. Bioch. Mathematical and physical observations concerning the Hopfield-Lagrange model with applications in constrained optimization. In *Proceedings of the 4th Belgian-Dutch Conference on Machine Learning*, pages 242–253, Erasmus Universiteit Rotterdam, June 1994.
- [70] J. van den Berg. Sweeping generalizations of Hopfield and Hopfield-Lagrange networks. In S.-I. Amari et al., editor, *Progress in Neural Information Processing (ICONIP'96)*, volume 1, pages 673–678, Singapore, 1996. Springer-Verlag.
- [71] J. van den Berg. On the Relaxation Dynamics and Applicability of the Most General Framework of Hopfield Networks. Invited presentation at the NIPS'96 workshop entitled 'ANNs and Continuous Optimization: Local minima, Sub-optimality and Computational Complexity', 1996.
- [72] J. van den Berg and J. van Dijk. How to create the simplest FAM-based fuzzy system. In N. Kasabov et al., editor, *Progress in Connectionist-Based Information Processing (ICONIP'97)*, volume 1, pages 392–395, Singapore, 1997. Springer-Verlag.
- [73] J. van den Berg and D. Ettes. Representation and Learning Capabilities of Additive Fuzzy Systems. In P. Kopacek and I.J. Rudas, editors, *Proceedings of the 1998 IEEE International Conference on Intelligent Engineering Systems (INES'98)*, pages 121–126, Vienna, Austria, September 1998.
- [74] D. Ettes and J. van den Berg. Representation and learning capabilities of additive fuzzy systems. In H. La Poutré and J. van den Herik, editors, *Proceedings X-th Netherlands/Belgium Conference on Artificial Intelligence (NAIC'98)*, pages 193–202, Amsterdam, November 1998.
- [75] Jan van den Berg and Martijn Schuemie. Intelligent information retrieval using an associative concept space. In M. Verleysen, editor, *Proceedings of the 7th European Symposium on Artificial Neural Networks (ESANN'99)*, pages 351–356, Bruges, Belgium, April 1999. Available at <http://www.dice.ucl.ac.be/Proceedings/esann/esannpdf/es1999-201.pdf>.
- [76] Martijn Schuemie and Jan van den Berg. Information retrieval systems using an associative conceptual space and self-organising maps. In E. Postma and M. Gyssens, editors, *Proceedings of the Eleventh Belgium/Netherlands Artificial Intelligence Conference (BNAIC'99)*, pages 91–98, Maastricht, November 1999.
- [77] Jan van den Berg and Willem-Max van den Bergh. On fuzzy competitive exception learning. In Thomas Walen, editor, *Proceedings of the 19th International Meeting of the North American Fuzzy Information Processing Society (NAFIPS2000)*, pages 34–38, Atlanta, USA, July 2000. IEEE Computer Society Press. (IEEE catalog number 00TH8500).
- [78] Willem-Max van den Bergh and Jan van den Berg. Fuzzy competitive exception learning. In Antal van den Bosch and Hans Weigand, editors, *Proceedings of the Eleventh Belgium/Netherlands Artificial Intelligence Conference (BNAIC'00)*, pages 77–84, 2000.

- [79] Willem-Max van den Bergh, Jan van den Berg, and Uzay Kaymak. Detecting noise trading using fuzzy exception learning. In *Proceedings of the Joint 9th IFSA World Congress and 20th NAFIPS International Conference (IFSA/NAFIPS2001)*, pages 946–951, Vancouver, Canada, July 2001. (ISBN: 0-7803-7079-1, IEEE catalog number: 01TH8569C).
- [80] Jan van den Berg, Willem-Max van den Bergh, and Uzay Kaymak. Probabilistic and statistical fuzzy set foundations of competitive exception learning. In *Proceedings of the 10th IEEE International Conference on Fuzzy Systems*, pages 1035–1038, Melbourne, Australia, 2001. (ISBN: 0-7803-7294-X, IEEE catalog number: 01CH37297).
- [81] Willem-Max van den Bergh, Jan van den Berg, and Uzay Kaymak. Detecting noise trading using fuzzy exception learning. In *Proceedings of the 13th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'01)*, pages 337–338, Amsterdam, October 2001.
- [82] Jan van den Berg, Uzay Kaymak, and Willem-Max van den Bergh. Fuzzy classification using probability-based rule weighting. In *Proceedings of the 11th IEEE International Conference on Fuzzy Systems*, Hawaii, USA, May 2002.
- [83] C. Christiaan van der Eijk, Erik M. van Mulligen, and Jan van den Berg. Finding complementary scientific concepts using a conceptual associative spatial graph. In W. Lesso N. Callaos, G. Whymark, editor, *Proceedings of the 6th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2002)*, volume XIII: Concepts and Applications of Systemics, Cybernetics and Informatics III, Orlando, Florida, USA, July 14–18 2002. International Institute of Informatics and Systemics.
- [84] Willem-Max van den Bergh, Uzay Kaymak, and Jan van den Berg. On the data-driven design of takagi-sugeno probabilistic fuzzy systems. In *Proceedings of the EUNITE-2002 International Conference*, pages 19–39, Albufeira, Portugal, September 2002. Available at <http://www.abo.fi/instut/iamsr/eunite/>.
- [85] Jan van den Berg, Uzay Kaymak, and Willem-Max van den Bergh. Probabilistic reasoning in fuzzy rule-based systems. In *Proceedings of the 14th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'02)*, pages 11–18, Leuven, October 2002. Nominated for the ‘Best Paper Award’.
- [86] Jan van den Berg, Uzay Kaymak, and Willem-Max van den Bergh. Fuzzy classification by using probability-based rule weighting. In *Proceedings of the 14th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'02)*, pages 401–402, Leuven, October 2002.
- [87] Uzay Kaymak, Willem-Max van den Bergh, and Jan van den Berg. A fuzzy additive reasoning scheme for probabilistic mamdani fuzzy systems. In *Proceedings of the 12th IEEE International Conference on Fuzzy Systems*, volume 1, pages 331–336, St. Louis, USA, May 25-28 2003.
- [88] A.M.G. Cornelissen, U. Kaymak, J. van den Berg, and W.J. Koops. Transition interval estimation to elicit membership functions in fuzzy evaluation models of animal production systems. In *Proceedings of the 12th IEEE International Conference on Fuzzy Systems*, volume 1, pages 1200–1205, St. Louis, USA, May 25-28 2003.
- [89] Uzay Kaymak and Jan van den Berg. On probabilistic connections of fuzzy systems. In *Proceedings of the 15th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'03)*, pages 187–194, Nijmegen, October 23-24 2003.
- [90] Richard van Duijn, Jan van den Berg, and Mark Vreijling. Intelligent maintenance scheduling using an expert-driven fuzzy-rule based object quality system. In *Proceedings of the 15th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'03)*, pages 115–122, Nijmegen, October 23-24 2003. Nominated for the ‘Best Paper Award’.
- [91] R. de Boer, J. van den Berg, and Wilco van Ginkel. Multilevel fusion-based intrusion detection. In *Proceedings of the 15th Information Resources Management Association International Conference: Innovations Through Information Technology*, pages 375–377, New Orleans, Louisiana, USA, May 23-26 2004.
- [92] Uzay Kaymak and Jan van den Berg. On constructing probabilistic fuzzy classifiers from weighted fuzzy clustering. In *Proceedings of the 13th IEEE International Conference on Fuzzy Systems*, pages 159–164, Budapest, Hungary, July 2004. IEEE Catalog Number 04CH37542C.
- [93] Jan van den Berg, Nees-Jan van Eck, Ludo Waltman, and Uzay Kaymak. A vicore architecture for intelligent knowledge management. In *Proceedings of KDNET Symposium on Knowledge-Based Systems and Services for the Public Sector, Workshop WS2, Mining Official Data*, pages 63–74, Bonn, Germany, June 3–4 2004.

- [94] Yuri Hamburger, Uzay Kaymak, and Jan van den Berg. Wavelet-based adaptation of value at risk estimation to different time horizons. In *Proceedings of the Fourth European Symposium on Intelligent Technologies and their implementation on Smart Adaptive Systems*, pages 195–208, Aachen, Germany, June 2004.
- [95] A. Ali Eldin, J. van den Berg, and R. Wagenaar. A fuzzy reasoning scheme for context sharing decision making. In *Proceedings of the Sixth International Conference on Electronic Commerce (ICEC04): Towards a New Services Landscape*, pages 371–375, Delft University of Technology, Faculty of Policy and Management, Delft, The Netherlands, October 25–27 2004. Association for Computing Machines, Inc. (ACM).
- [96] Ludo Waltman, Uzay Kaymak, and Jan van den Berg. Maximum likelihood parameter estimation in probabilistic fuzzy classifiers. In *Proceedings of the 14th IEEE International Conference on Fuzzy Systems*, pages 1098–1103, Nevada, USA, May 2005.
- [97] R. Bosma, U. Kaymak, J. van den Berg, and H. M. Udo. Fuzzy modelling of farmer motivations for integrated farming in the vietnamese mekong delta. In *Proceedings of the 14th IEEE International Conference on Fuzzy Systems*, pages 827–832, Nevada, USA, May 2005.
- [98] Nees Jan van Eck, Ludo Waltman, and Jan van den Berg. A novel algorithm for visualizing concept associations. In *Proceedings of the 16th International Workshop on Database and Expert Systems Applications (DEXA '05)*, pages 405–409, Copenhagen, Denmark, August 2005. IEEE Computer Society. Available at <http://csdl.computer.org/dl/proceedings/dexa/2005/2424/00/24240405.pdf>.
- [99] Ludo Waltman, Uzay Kaymak, and Jan van den Berg. Fuzzy histograms, a statistical analysis. In *Proceedings of Joint 4th EUSFLAT & 11th LFA Conference (EUSFLAT-LFA 2005)*, pages 605–610, Barcelona, Spain, 7–9 September 2005.
- [100] Roland Jeurissen and Jan van den Berg. Index tracking using a hybrid genetic algorithm. In *Proceedings of the CIMA'05 conference (track ACFM'05)*, Istanbul, Turkey, 2005. paper number: 910.
- [101] Viorel Milea and Jan van den Berg. An ants algorithm for bankruptcy prediction. In *Proceedings of the CIMA'05 conference (track ACFM'05)*, Istanbul, Turkey, 2005. paper number: 929.
- [102] Nees Jan van Eck, Ludo Waltman, and Jan van den Berg. A novel algorithm for visualizing concept associations. In *Proceedings of the 17th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'05)*, pages 397–398, Brussels, Belgium, October 2005.
- [103] Nees Jan van Eck, Ludo Waltman, and Jan van den Berg. A new method for visualizing associations between concepts. In *Proceedings of the 30th Annual Conference of the German Classification Society (GFKL2006)*, March 2006.
- [104] L. Mous and V.A.F. Dallagnol and W. Cheung and J. van den Berg. A Comparison of Particle Swarm Optimization and Genetic Algorithms Applied to Portfolio Selection. In David A. Pelta and Natalio Krasnogor, editors, *Proceedings of Workshop on Nature Inspired Cooperative Strategies for Optimization - NICSO 2006*, pages 109–121, June 29–30 2006.
- [105] Nees Jan van Eck, Flavius Frasinca, and Jan van den Berg. Visualizing concept associations using concept density maps. In *Proceedings of the 10th International Conference on Information Visualisation*, pages 270–275, London, July 5–7, 2006.
- [106] N.J. van Eck, L. Waltman, J. van den Berg, and U. Kaymak. Visualizing the wcci 2006 knowledge domain. In *Proceedings of the 2006 IEEE International Conference on Fuzzy Systems (part of WCCI2006)*, pages 7862–7869, Vancouver, Canada, July 2006.
- [107] N.J. van Eck, L. Waltman, J. van den Berg, and U. Kaymak. On the visualization of the soft computing knowledge domain. In *Proceedings of the Symposium on Fuzzy Systems in Computer Science 2006*, pages 96–97, Vancouver, Canada, 2006.
- [108] R.H. Bosma, Le Thanh Phong, J. van den Berg, U. Kaymak, H.M.J. Udo, and J.A.J. Verreth. Using fuzzy logic to simulate the composition of farming systems in the mekong delta. In *Proceedings of The Fourth International Seminar on Tropical Animal Production (ISTAP-4)*, pages 484–494, Yogyakarta, Indonesia, November 2006. ISBN 979-97243-8.

- [109] Viorel Milea, Erik Miedema, Jan van den Berg, and Uzay Kaymak. Towards a fuzzy model of traders' behavior. In Fouad Ben Abdelaziz, editor, *Proceedings of the XIII Congress of International Association for Fuzzy-Set Management and Economy*, pages 161–170, Hammamet, Tunisia, November 30 – December 2 2006. ISBN 978-9973-9979-0-6.
- [110] M.P.A. van Oosterhout, A. Veenstra, M. Meijer, N. Popal, and J. van den Berg. Agile IT and visibility platforms for enhancing supply chain security. In *Proceedings of the International Symposium on Maritime Safety, Security and Environmental Protection*, Athens, Greece, September 2007.
- [111] Jan van den Berg. Conceptualising and Analysing Internet Threats using a 4-Dimensional Hypercube. In Charles A. Shoniregun and Alex Logvynovskiy, editors, *Proceedings of the International Conference on Information Society (i-Society 2007)*, pages 249–255, Merrillville, Indiana, USA, October 7–11 2007. Book CD: ISBN = 0-9546628-1-4.
- [112] Vincent Wiegel and Jan van den Berg. Experimental Computational Philosophy: shedding new lights on old philosophical debates. In Mohammad Mehdi Dastani and Edwin de Jong, editors, *Proceedings of the 19th Belgian-Dutch Conference on Artificial Intelligence (BNAIC'07)*, pages 291–298, Utrecht, The Netherlands, November 5–6 2007.
- [113] Vincent Wiegel and Jan van den Berg. Experimental Computational Philosophy: shedding new lights on old philosophical debates. In The Society for the Study of Artificial Intelligence and Simulation of Behaviour, editors, *Proceedings of the Symposium on Behaviour Regulation in Multi-Agent Systems (In conjunction with the 2008 AISB Convention)*, pages 62–67, Univerity of Aberdeen, Scotland, April 1–4 2008. ISBN: 190295663X.
- [114] Roland Jeurissen and Jan van den Berg. Optimized index tracking using a hybrid genetic algorithm. In *Proceedings of the 2008 IEEE Congress on Evolutionary Computation (CEC2008, part of WCCI2008)*, pages 2327–2334, Hong Kong, China, June 2008. ISBN: 978-1-4244-1823-7.
- [115] Indira Nurtanti, Semir Daskapan and Jan van den Berg. Evaluating Trust Algorithms for Peer-to-Peer File Sharing. In Charles A. Shoniregun and Alex Logvynovskiy and Fredrick Mtenzi, editor, *Proceedings of the 3rd International Conference for Internet Technology and Secured Transactions (ICITST-2008)*, pages 142–149, Dublin, Ireland, 23–28 June 2008.
- [116] Semir Daskapan, Indira Nurtanti and Jan van den Berg. Improving Trust Valuation for File Sharing in P2P Networks. In , editor, *Proceedings of the 2008 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2008)*, Singapore, 12–15 October 2008.
- [117] Nees-Jan van Eck, Ludo Waltman, Rommert Dekker, and Jan van den Berg. An experimental comparison of bibliometric mapping techniques. In *Proceedings (Book of Abstracts) of the 10th International Conference on Science and Technology Indicators*, pages 45–48, Vienna, Austria, 17th-20th September 2008.
- [118] Guido van Heck, Itamar Sharon, Paulus Kampert, and Jan van den Berg. Introducing Electronic Child Records: balancing personal interests, system performance, and social values. In *Proceedings of the 2009 IEEE International Conference on Social Computing (SocialCom 2009), part of the 12th IEEE International Conference on Computational Science and Engineering (CSE 2009)*, pages 568–575, Vancouver, Canada, August 2009. IEEE Computer Society. DOI 10.1109/CSE.2009.42.
- [119] Jan van den Berg. Further Exploring Statistical Fuzzy Entropy. In *In Book of Abstracts of the 2nd International Workshop of the ERCIM Working Group on Computing & Statistics, session 'Foundations for Fuzzy Statistical Analysis'*, page 55, Cyprus, October 29–31, 2009. European Research Consortium for Informatics and Mathematics (ERCIM). paper E197.
- [120] Hanane Ouna and Jan van den Berg. Developing a Policy Framework to enable beneficial use of ICTs for national and community objectives. In *Proceedings of the 2nd International Conference on Adaptive Science & Technology (ICAST'09)*, Accra, Ghana, December 14–16 2009.
- [121] Mohsen Davarynejad, Sobhan Davarynejad, Jos Vrancken, and Jan van den Berg. Granular value-function approximation for road network traffic control. In *Proceedings of the the 2010 IEEE International Conference on Networking, Sensing, and Control*, pages 14–18, Chicago, IL, USA, April 11-13 2010. IEEE. ISBN: 978-1-4244-6452-4(10).

- [122] Itamar Sharon, Michel dos Santos Soares, Joseph Barjis, Jan van den Berg, and Jos Vrancken. A Decision Framework for Selecting a Suitable Software Development Proces (category: Full Paper). In *Proceedings of ICEIS 2010, 12th International Conference on Enterprise Information Systems, Volume 5: Information Systems Analysis and Specification*, pages 34–43, Funchal, Madeira, Portugal, June 08–12, 2010. ISBN: 978-989-8425-04-1.
- [123] Mohsen Davarynejad, Jelmer van Ast, Jos Vrancken, and Jan van den Berg. Evolutionary Value Function Approximation. In *Proceedings of the the 2011 IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning (ADPRL 2011) within the IEEE Symposium Series of Computational Intelligence (SSCI 2011)*, Paris, France, April 11-15 2011. ISBN: 978-1-4244-9888-8.
- [124] Mohsen Davarynejad, Jafar Rezaei, Jos Vrancken, Jan van den Berg, and Carlos A. Coello Coello. Accelerating convergence towards the optimal pareto front. In *Proceedings of the 2011 IEEE Congress on Evolutionary Computation (IEEE CEC 2011)*, pages 2107–2114, New Orleans, USA, June 5–8 2011. ISBN: 978-1-4244-7835-4.
- [125] Guido Demmenie, Jan van den Berg, Menno Israel, Virginia Dignum, and Jos Vrancken. (Exceptional) workflow mining: A stepwise approach for extracting event logs from corporate network data. In *Proceedings of the annual Machine Learning Conference of Belgium and The Netherlands (BeNeLearn)*, pages 133–134, The Hague, Netherlands Forensics Institute, May 20 2011. URL of the proceedings: <http://www.liacs.nl/~putten/benelearn2011/Benelearn2011.Proceedings.pdf>.
- [126] Potchara Pruksasri, Jan van den Berg, and Somnuk Keretho. Accountability in Single Window Systems using an Internal Certificate Authority, a case study on Thailand’s national single window system. In *Proceedings of the IADIS International Conference, E-commerce 2011*, pages 129–136, Rome, Italy, July 21–23 2011. ISBN: 978-972-8939-51-9.
- [127] Ebrahim Rahimi, Wim Veen, and Jan van den Berg. Designing a PLE-based learning system in a secondary school. In *Proceedings of the PLE Conference 2011*, Southampton, United Kingdom, July 11–13 2011.
- [128] Mohsen Davarynejad, Andreas Hegyi, Jos Vrancken, and Jan van den Berg. Motorway Ramp-Metering Control with Queuing Consideration using  $q$ -Learning. In *Proceedings of the 14th International IEEE Conference on Intelligent Transportation Systems (ITSC 2011)*, pages 1652–1658, Washington, DC, USA, October 5–7 2011. ISBN: 978-1-4577-2197-7.
- [129] Mohsen Davarynejad, Yubin Wang, Jos Vrancken, and Jan van den Berg. Multi-phase Time Series Prediction for Highway Flow Forecasting. In *Proceedings of the 14th International IEEE Conference on Intelligent Transportation Systems (ITSC 2011)*, pages 2033–2038, Washington, DC, USA, October 5–7 2011. ISBN: 978-1-4577-2197-7.
- [130] Semir Daskapan and Jan van den Berg. Designing Cyber Warfare Information Infrastructure Resilience. In Christopher Bolan and Professor Craig Valli, editor, *Proceedings of the 2011 secau Security Congress 12th Australian Information Warfare Conference (IWAR 2011)*, pages 1–8, Perth, Australia, 5–7 December 2011. ISBN 978-0-7298-0699-2; Winner of *Best Paper Award* of IWAR 2011.
- [131] Wout Hofman and Harrie Bastiaansen and Jan van den Berg and Potchara Pruksasri. A Platform for Secure, Safe, and Sustainable Logistics. In *Proceedings of the e-Freight 2012 Conference*, Delft, May 9-10 2012.
- [132] Tineke Egyedi and Jan van den Berg. Analysing Inverse Infrastructures using a Complex Adaptive Systems Perspective. In *Proceedings of the Third International Engineering Systems Symposium (CESUN 2012)*, Delft University of Technology, June 18–20 2012. available at <http://cesun2012.tudelft.nl/images/6/69/Egyedi.pdf>.
- [133] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. Designing and Implementing PLEs in a Secondary School using Web2.0 Tools. In *Proceedings of the third PLE Conference 2012*, Aveiro, Portugal, July 11–13 2012. available at <http://revistas.ua.pt/index.php/ple/issue/current>.
- [134] Potchara Pruksasri, Jan van den Berg, and Wout Hofman. Three Protocols for Securing the Data Pipeline of the Iinternational Supply Chain. In *Proceedings of the IADIS International Conference, E-commerce 2012*, pages 27–34, Lisbon, Portugal, July 21–23 2012.
- [135] Johannes de Vries, Jan van den Berg, Hans Hoogstraten, and Semir Daskapan. Systems for detecting advanced persistent threats, a development roadmap using intelligent data analysis. In *Proceedings of the ASE International Conference on Cyber Security*, pages 54–61, Washinton D.C., USA, December 14–16

2012. IEEE Computer Society. (paper acceptance rate 9,6%, DOI 10.1109/SocialInformatics.2012.59, IEEE Computer Society.
- [136] Olga Kulikova, Jan van den Berg, Ronald Heil, and Wolter Pieters. Cyber crisis management: A decision-support framework for disclosing security incident information. In *Proceedings of the ASE International Conference on Cyber Security*, pages 103–112, Washinton D.C., USA, December 14–16 2012. IEEE Computer Society. (paper acceptance rate 9,6%), DOI 10.1109/SocialInformatics.2012.24, IEEE Computer Society.
- [137] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. A Framework for Designing Enhanced Learning Activities in Web2.0-based Personal Learning Environments. In *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications*, pages 2222–2231, British Columbia, Canada, June 24–28 2013. Paper available at <http://academicexperts.org/conf/EDMEDIA/2013/papers/39005/>.
- [138] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. A Roadmap for Building Web2.0-based Personal Learning Environments in Educational Settings. In *Proceedings of the fourth international conference on Personal Learning Environments (The PLE Conference 2013)*, Berlin, Germany, 10–12 July 2013.
- [139] Ebrahim Rahimi, Jan van den Berg, and Wim Veen. A Framework to Support the Negotiation of Control between Teachers and Students in PLEs. In *Proceedings of the fourth international conference on Personal Learning Environments (The PLE Conference 2013)*, Berlin, Germany, 10–12 July 2013.
- [140] Amr Ali Eldin and Jan van den Berg. A Self-disclosure Framework for Social Mobile Applications. In *Proceedings of the Sixth IEEE/IFIP International Conference on New Technologies, Mobility and Security (NTMS2014)*, Dubai, UAE, March 30 – April 2 2014. DOI:10.1109/NTMS.2014.6814003; Available at <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6814003>.
- [141] Ebrahim Rahimi, Sebastiaan Tampinongkol, Mohammad Sedighi, Jan van den Berg, and Wim Veen. Investigating the Relationship Between Self- and Co-regulatory Learning Processes in a Workplace e-learning System. In *Proceedings of the EDEN 2014 conference*, Zagreb, Croatia, June 2014. Conference info: <http://www.eden-online.org/eden-events/upcoming-conference.html>.
- [142] Potchara Pruksasri, Jan van den Berg, and Wout Hofman. Global Monitoring of Dynamic Information Systems. In *Proceedings of the 18th International Computer Science and Engineering Conference*, Khona Kaen, Thailand, July 30–August 1 2014.
- [143] Jan van den Berg, Jacqueline van Zoggel, Mireille Snels, Mark van Leeuwen, Sergei Boeke, Leo van de Koppen, Jan van der Lubbe, Bibi van den Berg, and Tony de Bos. On (the Emergence of) Cyber Security Science and its Challenges for Cyber Security Education. In *Proceedings of the NATO IST-122 Cyber Security Science and Engineering Symposium*, Tallinn, Estonia, October 13–14 2014. Winner of the BEST PAPER AWARD.
- [144] P. Pruksasri, J. van den Berg, W. Hofman, and Yao-Hua Tan. Data concealing of supply chain transactions using the distributed trust backbone. In *Proceedings of the 9<sup>th</sup> International Conference for Internet Technology and Secured Transactions*, London, December 8-10 2014.
- [145] M. Ma, J. Weber, and J. van den Berg. Secure public-auditing cloud storage enabling data dynamics in the standard model. In *Proceedings of the Third International Conference on Digital Information Processing, Data Mining, and Wireless Communications (DIPDMWC)*, pages 170–175. Moscow, 2016. DOI: 10.1109/DIPDMWC.2016.7529384.
- [146] Rhythima Shinde, Pieter van der Veecken, Stijn van Schooten, Mirko Dunnewind, and Jan van den Berg. Applying bayesian game theory to analyse cyber risks of bank transaction systems. In , editor, *Proceedings of the IEEE conference on Computing, Analytics and Security Trends (CAST 2016)*, pages 84–89. IEEE, Pune, India, December 19-21 2016. paper ID = 112.
- [147] Rhythima Shinde, Stijn van Schooten, Pieter van der Veecken, and Jan van den Berg. Ransomware: Studying transfer and mitigation. In , editor, *Proceedings of the IEEE conference on Computing, Analytics and Security Trends (CAST 2016)*, pages 90–95. IEEE, Pune, India, December 19-21 2016. paper ID = 113.
- [148] Jan van den Berg. Forward message confluence-2017. In Abhay Bansal et al., editor, *Abstract Book of the 7th International Conference Confluence-2017*, page xxvii. Amity University, Noida, India, January 12-13 2017.

- [149] Mingxiao Ma, André M.H. Teixeira, Jan van den Berg, and Peter Palensky. Voltage control in distributed generation under measurement falsification attacks. In , editor, *Proceedings of the 20th IFAC World Congress*. Toulouse, France, July 9-14 2017. Accepted for presentation.
- [150] Raymond H. Bierens, Bram Klievink, and Jan van den Berg. A social cyber contract theory model for understanding national cyber strategies. In Jansen M. et al., editor, *Proceedings of IFIP EGOV-EPART 2017 Conference (EGOVEPART2017)*, volume 10428 of *Lecture Notes in Computer Science*, pages 166–176. St Petersburg, Russia, September 4–7 2017. ISBN: 978-3-319-64677-0.
- [151] Maarten Aertsen, Maciej Korczynski, Giovane C. M. Moura, Samaneh Tajalizadehkhoob, and Jan van den Berg. No domain left behind: is let’s encrypt democratizing encryption? In *Proceedings of Applied Networking Research Workshop 2017 (ANRW’17)*, pages 1–6, Prague, Czech Republic, July 15 2017. ACM. DOI: 10.1145/3106328.3106338; available on line.
- [152] Clara Maathuis, Wolter Pieters, and Jan van den Berg. A computational ontology for cyber operations. In *Proceedings of the 17th European Conference on Cyber Warfare and Security (ECCWS 2018)*, pages 278–288, Oslo, Norway, June 28–29 2018. ACPI. ISBN: 978-1-911218-85-2.
- [153] Clara Maathuis, Wolter Pieters, and Jan van den Berg. Assessment methodology for collateral damage and military (dis)advange in cyber operations. In *Proceedings of the International Conference on Military Communications and Information Systems (ICMCIS)*, Warsaw, Poland, May 22–23 2018. ISBN: 1538645602, 9781538645604.
- [154] Jan van den Berg. Grasping cybersecurity: A set of essential mental models. In *Proceedings of the 18th European Conference on Cyber Warfare and Security*, pages 534–543. Coimbra, Portugal, July 4–5 2019.
- [155] Clara Maathuis, Wolter Pieters, and Jan van den Berg. A knowledge-based model for assessing the effects of cyber warfare. In *Proceedings of the 12th NATO Conference on Operations Research & Analysis*. Zagreb, Croatia, October 15–16 2018.
- [156] Vitali Herrera-Semenets, Raudel Hernández-León, Lázaro Bustio-Martínez, and Jan van den Berg. Red Light/Green,Light: A Lightweight Algorithm for, Possibly, Fraudulent Online Behavior Change Detection. In *Proceedings of the 21th Mexican International Conference on Artificial Intelligence (MICAI 2022)*, volume 13613 of *Lecture Notes in Artificial Intelligence*, pages 316–327. Springer, Monterrey, Mexico, October 24–29 2022. ISBN: 978-3-031-19496-2.
- [157] Vitali Herrera-Semenets, Lázaro Bustio-Martínez, Raudel Hernández-León, and Jan van den Berg. A Decision Tree Induction Algorithm for Efficient Rule Evaluation Using Shannon’s Expansion. In *Proceedings: 22nd Mexican International Conference on Artificial Intelligence, MICAI 2023*, volume 1439 of *Lecture Notes in Computer Science, Advances in Computational Intelligence (LNAI)*, pages 241–252. Springer, Yucatán, Mexico, November 13–18 2022. ISBN: 978-3-031-47765-2.
- [158] Bustio-Martínez, L., Herrera-Semenets, V., García-Mendoza, J-L., González-Ordiano, J.Á, Zúñiga-Morales, L., Sánchez Rivero, R., Quiróz-Ibarra, J. E., Santander-Molina, P. A., van den Berg, J., and Buscaldi, D. Towards Automatic Principles of Persuasion Detection Using a Machine Learning Approach. In *Progress in Artificial Intelligence and Pattern Recognition - 8th International Congress on Artificial Intelligence and Pattern Recognition, IWAIPR 2023, Proceedings*, volume 14335 of *(Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformaticsn)*, pages 155–166. Springer, Varadero, Cuba, September 27–29 2023. ISBN: 978-3-031-49552-6.
- [159] Vitali Herrera-Semenets, Lázaro Bustio-Martínez, Yamel Pérez-Guadarramas, Juan Luis García-Mendoza, and Jan van den Berg. Unmasking phishing attempts: A study on detection in spanish emails. In *Proceedings of the 27th Iberoamerican Congress on Pattern Recognition(CIARP 2024)*, Lecture Notes in Computer Science. Springer, Talvca, Chile, November 26-29 2024. Forthcoming.
- [160] Vitali Herrera-Semenets, Lázaro Bustio-Martínez, Jorge Ángel González-Ordiano, and Jan van den Berg. Tax Underreporting Detection Using an Unsupervised Learning Approach. In *Proceedings of the 23rd Mexican International Conference on Artificial Intelligence(MICAI 2024)*, volume 15247 of *Lecture Notes in Computer Science*, pages 16–28. Springer, INAOE, Tonantzintla, Puebla, México, October 21–25 2024. "https://doi.org/10.1007/978-3-031-75543-9\_2".
- [161] Vitali Herrera-Semenets, Lázaro Bustio-Martínez, Pérez-Guadarramas1, Juan Luis García-Mendoz, and Jan van den Berg. Unmasking Phishing Attempts: A Study on Detection in Spanish Emails. In *Proceedings of the 27th Iberoamerican Congress on Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications (CIARP 2024)*, volume 15369 of *Lecture Notes in Computer Science*, pages 1–15. Springer, Talca, Chile, November 26–29 2024. "https://doi.org/10.1007/978-3-031-76604-6\_1".

- [162] Jan van den Berg. Veelbelovende techniek zoekt naar toepassingen. *Automatiseringsgids*, 29(13):12, Maart 1995.
- [163] Ed Ridderbeekx and Jan van den Berg. Internetbeveiliging, een beheerperspektief. *Informatie*, (jrg. 40):46–55, April 1998.
- [164] Jan van den Berg, Mark Kilsdonk, and Ed Ridderbeekx. Beveiligingsrisico's van java-applets. *Informatie*, (jrg. 41):18–29, Februari 1999.
- [165] Jan van den Berg, Mark Kilsdonk, and Ed Ridderbeekx. Beveiliging van java-applets. *Handboek EDP-auditing*, 16:1–29, Februari 2000.
- [166] Ed Ridderbeekx, Jan van den Berg, and Mark Kilsdonk. Auditing java-applets. *Handboek EDP-auditing*, 18:1–22, Oktober 2000.
- [167] R. Tan, J. van den Berg, and W-M van den Bergh. Visual assessment of creditworthiness using self-organizing maps. In J. Meij, editor, *Dealing with the data flood, Mining Data, Text and Multimedia*, pages 252–259, Den Haag, April 2002. STT/Beweton.
- [168] M. Schuemie, J. van den Berg, and R. Tan. Self organising maps, a visual exploration tool in datamining. In J. Meij, editor, *Dealing with the data flood, Mining Data, Text and Multimedia*, pages 298–307, Den Haag, April 2002. STT/Beweton.
- [169] W-M van den Bergh and J. van den Berg. Mining for pockets of predictability in financial markets. In J. Meij, editor, *Dealing with the data flood, Mining Data, Text and Multimedia*, pages 763–770, Den Haag, April 2002. STT/Beweton.
- [170] Christiaan van der Eijk, Erik van Mulligen, Jan Kors, Barend Mons, and Jan van den Berg. Zoeken naar impliciete kennis in wetenschappelijke literatuur. *Informatie & Zorg*, 32(1):9–13, April 2003.
- [171] Cas de Bie and Jan van den Berg. Towards a quantitative model for measuring reputation loss caused by IT-security incidents. *The EDP-auditor*, 16(1):19–29, 2007.
- [172] E. Ciftci, K. Tap, J. van den Berg, and A.J. Keemink. *ICT Scan MKB Rotterdam 2007*. Kenniskring Human Centered ICT en Kenniskring Logistics, Mei 2007. ISBN: 0-471-16851-3.
- [173] Lars Hoogendijk, Jan van den Berg, and Peter Groen. Beveiliging van Telewerken: het identificeren van risico's en maatregelen, een case study binnen de rijksoverheid. *Informatiebeveiliging*, pages 13–20, September 2007.
- [174] Jan van den Berg. Data: opslag en communicatie. In Hilly Kort, Anneloes Cordia, and Luc de Witte, editors, *Technologie en Langdurige Zorg*, chapter 25. Lemma, 2008.
- [175] Jan van den Berg. Cyber security, hoe beveiligen we cyberspace? *Jaarboek Koninklijke Maatschappij voor Natuurkunde*, (93):93–102, 2015. available at <http://natuurwetenschappen-diligentia.nl/jaarboeken>.
- [176] Herbert Leenstra, Jan van den Berg, and Bert van Wee. Stappenplan voor cyber security zelfrijdende auto (gebrek aan cyber security bedreigt autonoom rijdende auto). *Verkeerskunde*, (1):8–16, February 2017. full version available at [www.verkeerskunde.nl/VK1-2017/cybersecurity](http://www.verkeerskunde.nl/VK1-2017/cybersecurity).
- [177] Jan van den Berg. Hoe cyber security iets heel gewoons wordt. In Paul Pattynama and John van Trijp, editors, *Na Vandaag, de toekomst van een veilige samenleving*, pages 32–35. Stichting Innovatie voor Veiligheid (SIVV), 2017.
- [178] J. van den Berg and J.C. Bioch. Constrained Optimization with the Hopfield-Lagrange model. In *Working Papers NAIC'93*, pages 201–208, Drienerlo, November 1993.
- [179] J. van den Berg and J.C. Bioch. Capabilities of the symbiosis between the Hopfield model and Lagrange multipliers in resolving constrained optimization problems. In *Proceedings of Computing Science in the Netherlands (CSN'94)*, pages 21–22, Utrecht, November 1994.
- [180] J. van den Berg. A General Framework for Hopfield Neural Networks. In *Proceedings of the Seventh Dutch Conference on Artificial Intelligence (NAIC'95)*, pages 265–274, June 1995.
- [181] J. van den Berg. The Most General Framework of Continuous Hopfield Neural Networks. In *Proceedings of the Eighth Dutch Conference on Artificial Intelligence (NAIC'96)*, pages 23–34, Utrecht, November 1996.

- [182] Luc V. de Zeeuw, Tobias A. Knoch, Jan van den Berg, and Frank G. Grosveld. Erasmus Computing Grid, het bouwen van een 20 Tera-FLOPS Virtuele Supercomputer. *Proceedings van het Nationaal Informatica Onderwijs Congres (NIOC 2007)*, pages 52–59, April 2007. Available at <http://www.nioc.nl/content/files/nioc%20proceedings%202007.pdf>.
- [183] Jan van den Berg. Historische Schets van de Herstructurering van het Wetenschappelijk Onderwijs. In Martien Lops, editor, *Lustrumbrochure VSSD - Congres Herstructurering Wetenschappelijk Onderwijs*, pages 26–38. VSSD-Huisdrukkerij TH Delft, January 31 1974.
- [184] J. van den Berg. Book Review of the Book ‘Neural Networks and Qualitative Physics, a Viability Approach’ by Jean-Pierre Aubin, Cambridge University Press, Cambridge UK, 1996. *Artificial Intelligence in Medicine*, 13:239–241, 1998.
- [185] J. van den Berg. Fuzzy exception learning for noise trading unmasking. In *Abstracts of EURO-2001, the European Operational Research Conference 2001*, pages 103–104, Erasmus University Rotterdam, The Netherlands, July 2001.
- [186] Willem-Max van den Bergh, Onno Steenbeek, and Jan van den Berg. Relative distress and return distribution characteristics of japanese stocks, a fuzzy-probabilistic approach. In *2002 APFA/PACAP/FMA Finance Conference*, Tokyo, Japan, July 2002. (Also presented at the *ECFR Conference ‘Performance Evaluation in Asia’*, March 22, 2002, Erasmus University Rotterdam).
- [187] Jan van den Berg. Basics of smart adaptive systems. In *Proceedings of the first EUNITE-Workshop on Smart Adaptive Systems in Finance*, Amsterdam, November 2002.
- [188] Jan van den Berg. Information security by extensive number crunching. *Medium Econometrische Toepassingen*, 8(1):15–19, Winter 2000.
- [189] Jan van den Berg. E-business: Beloftes en bedreigingen van het www. *Interface, Tijdschrift voor Bedrijfskunde*, 18:45–46, Februari 2002.
- [190] Chi Lok Cheung, Heru Sataputera Na, and Jan van den Berg. Improving asset allocation using a cart model. In Jan van den Berg and Uzay Kaymak, editors, *Proceedings of the 2nd Workshop on Smart Adaptive Systems in Finance*, Rotterdam, May 19 2004. Rotterdam school of Economics, Department of Computer Science.
- [191] R.H. Bosma, Uzay Kaymak, J. van den Berg, H.M. Udo, and J. Verreth. Analysing mekong delta farmers’ motivations for aquaculture with fuzzy logic. In *Abstracts of the World Aquaculture 2005 Conference*, Bali, Indonesia, April 9–13, 2005.
- [192] Luc V. de Zeeuw, Ingrid Mulder, Jan van den Berg, Frank G. Grosveld, and Tobias A. Knoch. The Erasmus Computing Grid (ECG): Resource sharing at public funded organizations (poster). In *Poster session at the 4th International Conference on e-Social Science*, Manchester (UK), June 2008.
- [193] Jan van den Berg. Negatieve sentimenten rond het EPD. *ICT&Zorg*, 10(2):5, March/April 2009.
- [194] Pieter Hartel, Marianne Junger, and Jan van den Berg. Wat gaan we doen tegen de cyberaanvallen? *Informatie Beveiliging Magazine*, (13):10–11, 2013.
- [195] Jan van den Berg and Jacqueline van Zoggel. Cyber security vraagstukken. *Informatie Beveiliging Magazine*, (?):19–22, June 2014.
- [196] Jan van den Berg. Wat maakt cyber security anders dan informatiebeveiliging? *Magazine Nationale Veiligheid en Crisisbeheersing 2015*, (2):4–5, May 2015.
- [197] Jan van den Berg. Big data en veiligheid: uitdagingen en dilemma’s. *KIVI Nieuwsbrief*, 2016. Available at <https://www.kivi.nl/carriere/maatschappelijk-platform/jan-van-den-berg>.
- [198] Jan van den Berg. Werk aan een sociaal contract in cyberspace. *De Ingenieur*, (??), 2018. to appear.
- [199] Jan van den Berg and Jan C. Bioch. Constrained optimization with a continuous hopfield-lagrange model. Technical Report EUR-FEW-CS-93-10, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Dept. of Computer Science, Augustus 1993.
- [200] Jan van den Berg and Jan C. Bioch. On the statistical mechanics of (un)constrained stochastic hopfield and ‘elastic’ neural networks. Technical Report EUR-FEW-CS-94-08, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Dept. of Computer Science, September 1994.

- [201] Jan van den Berg and Jock H. Geselschap. An analysis of various elastic net algorithms. Technical Report EUR-FEW-CS-95-06, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Dept. of Computer Science, Augustus 1995.
- [202] Jan van den Berg. Generalized hopfield networks for constrained optimization. Technical Report EUR-FEW-CS-98-04/RIBES-rapport 98-13, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Rotterdams Instituut voor Bedrijfseconomische Studies (RIBES), 1998.
- [203] Ed Ridderbeekx and Jan van den Berg. Internetbeveiliging, een beheerperspektief. Technical Report EUR-FEW-CS-98-05/RIBES-rapport 98-14, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Rotterdams Instituut voor Bedrijfseconomische Studies (RIBES), 1998.
- [204] Martijn Schuemie and Jan van den Berg. Associative conceptual space-based information retrieval systems. Technical Report EUR-FEW-CS-98-08/RIBES-rapport 98-49, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Rotterdams Instituut voor Bedrijfseconomische Studies (RIBES), 1998.
- [205] Mark Kilsdonk, Ed Ridderbeekx, and Jan van den Berg. Beveiliging van java-applets. Technical Report EUR-FEW-CS-98-09/RIBES-rapport 98-50, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Rotterdams Instituut voor Bedrijfseconomische Studies (RIBES), 1998.
- [206] Jan van den Berg. Another review of generalized hopfield networks for constrained optimization. Technical Report RIBES-rapport 99-17, Erasmus Universiteit Rotterdam, Faculteit Economische Wetenschappen, Rotterdams Instituut voor Bedrijfseconomische Studies (RIBES), 1999.
- [207] Willem-Max van den Bergh and Jan van den Berg. Competitive exception learning using fuzzy frequency distributions. Technical Report ERS-2000-06-LIS, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2000. <http://www.eur.nl/WebDOC/doc/erim/erimrs20000502164035.pdf>.
- [208] A.M.G. Cornelissen, J. van den Berg, W.J. Koops, M. Grossman, and H.M.J. Udo. Assessment of sustainable development: A novel approach using fuzzy set theory. Technical Report ERS-2000-23-LIS, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2000. <http://www.eur.nl/WebDOC/doc/erim/erimrs20000622134831.pdf>.
- [209] Jan van den Berg, Willem-Max van den Bergh, and Uzay Kaymak. Probabilistic and statistical fuzzy set foundations of competitive exception learning. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2001. <http://www.eur.nl/WebDOC/doc/erim/erimrs20010703151606.pdf>.
- [210] Willem-Max van den Bergh, Onno Steenbeek, and Jan van den Berg. Relative distress and return distribution characteristics of japanese stocks, a fuzzy-probabilistic approach. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2002. <http://www.eur.nl/WebDOC/doc/erim/erimrs20020315141408.pdf>.
- [211] A.M.G. Cornelissen, J. van den Berg, W.J. Koops, and U. Kaymak. Eliciting expert knowledge for fuzzy evaluation of agricultural production systems. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2002. <http://www.eur.nl/WebDOC/doc/erim/erimrs20021125180137.pdf>.
- [212] Jan van den Berg, Uzay Kaymak, and Willem-Max van den Bergh. Financial markets analysis by probabilistic fuzzy modelling. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, 2003. Report No. 036-LIS, 19 pp.: reached to the SSRN's Top Ten download list for Financial Engineering eJournal, on 09-08-2011 after 519 downloads (see also [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=411664](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=411664)).
- [213] Hossein Azadi, Mansour Shahvali, Jan van den Berg, and Nezamodin Faghieh. Sustainable rangeland management using a multi-fuzzy model: How to deal with heterogeneous experts' knowledge. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, April 2005. report No.: ERS-2005-016-F&A, <https://ep.eur.nl/handle/1765/1934>.
- [214] Nees Jan van Eck, Jan van den Berg, Remco de Boer, and Mark Vreijling. Selectie kansrijke tdm-methoden en reasoning technieken. Technical report, SemLab/Erasmus University Rotterdam, Augustus 2004. Rapportage 4: VICORE project (TSIT3024).

- [215] Nees Jan van Eck, Jan van den Berg, and Flavius Frasinca. Definitie tdm methode en conceptrelatie representatie data. Technical report, Erasmus University Rotterdam, November 2005. Rapportage 8: VICORE project (TSIT3024).
- [216] H.S. Na, L. Couto Miranda, J. van den Berg, and M. Leipoldt. Data scaling for operational risk modelling. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, January 2006. report No.: ERS-2005-092-LIS, <https://ep.eur.nl/handle/1765/7234>.
- [217] Jan van den Berg, Uzay Kaymak, and Rui Jorge Almeida. Function Approximation Using Probabilistic Fuzzy Systems. Technical report, Erasmus Research Institute of Management (ERIM), Erasmus University Rotterdam, December 2011. report No.: ERS-2011-026-LIS, <http://hdl.handle.net/1765/30923>.
- [218] Jan van den Berg. *Syllabus Programmeren deel I*. Hogeschool Eindhoven, studierichting Elektrotechniek, 1986.
- [219] Jan van den Berg. *Syllabus Programmeren deel II*. Hogeschool Eindhoven, studierichting Elektrotechniek, Januari 1987. Diktaatnr. 325.
- [220] Jan van den Berg. *Syllabus Voortgezet Programmeren*. Hogeschool Eindhoven, studierichting Elektrotechniek, 1988.
- [221] Jan van den Berg. *Inleiding Computerarchitectuur behorende bij het college Computersystemen en Telematica*. Erasmus Universiteit, Stichting Syllabi, Juli 1990.
- [222] M.P.A. van Oosterhout, A. Veenstra, R. Zuidwijk, and J. van den Berg. Visibility in global supply chains. In *Proceedings of the Smart Business Network Conference (SBN2008)*, Beijing, China, 19–23 May 2008. Accepted for publicatio, but never appeared.
- [223] Wolter Pieters, Zofia Lukszo, and Jan van den Berg. Estimating hazard rates for malicious attacks. In *Proceedings of the IEEE Symposium on Security and Privacy*, San Francisco, CA, USA, May 19–22 2013. In submission.