

List of publications

Theses:

1. Grąbczewski K (1994) *Systemy dowodzenia twierdzeń i ich implementacje w pakiecie „Isabelle”*. Master's thesis, Nicolaus Copernicus University, Toruń, Poland.
2. Grąbczewski K (2003) *Zastosowanie kryterium separowalności do generowania reguł klasyfikacji na podstawie baz danych*. PhD thesis, Systems Research Institute, Polish Academy of Sciences, Warszawa, Poland.

Book chapters:

1. Duch W, Adamczak R, Grąbczewski K, Żal G, Hayashi Y (1999) Fuzzy and crisp logical rule extraction methods in application to medical data. *Fuzzy Systems in Medicine*, Springer 1999.
2. Duch W, Jankowski N, Grąbczewski K, Adamczak R, *Optimization and interpretation of rule-based classifiers*, *Advances in Soft Computing*, Physica-Verlag (Springer) 2000, pp. 1-13.
3. Grąbczewski K, Duch W, Adamczak R, *Neuronowe metody odkrywania wiedzy w danych*. *Biocybernetyka 2000, Tom 6: Sieci neuronowe* (red. W. Duch, J. Korbićz, L. Rutkowski i R. Tadeusiewicz), III.20, pp. 637-662.
4. Duch W, Biesiada J, Winiarski T, Grudziński K, Grąbczewski K, Feature selection based on information theory filters and feature elimination wrapper methods. *Neural Networks and Soft Computing*, Springer 2002.
5. Grąbczewski K, Duch W, *Forests of decision trees*. *Neural Networks and Soft Computing*, Springer 2002.
6. Grąbczewski K, Jankowski N, *Mining for complex models comprising feature selection and classification*, In: *Feature extraction, foundations and applications*, Editors: Guyon I, Gunn S, Nikravesh M, Zadeh L, *Studies in Fuzziness and Soft Computing*. Physica-Verlag, Springer 2006, pp. 473–489.
7. Jankowski N, Grąbczewski K, *Learning Machines*, In: *Feature extraction, foundations and applications*, Editors: Guyon I, Gunn S, Nikravesh M, Zadeh L, *Studies in Fuzziness and Soft Computing*. Physica-Verlag, Springer 2006, pp. 29–64.
8. Jankowski N, Grąbczewski K, *Learning machines information distribution system with example applications*, In: *Computer Recognition Systems 2*, Editors: Kurzyński M, Pułała E, Woźniak M, Żołnierk A, *Advances in Soft Computing*, Springer, 2007, pp. 205–215.

9. Jankowski N, Grąbczewski K, **Universal Meta-Learning Architecture and Algorithms**, In: Meta-Learning in Computational Intelligence, Editors: Jankowski N, Duch W, Grąbczewski K, Studies in Computational Intelligence, Springer Berlin / Heidelberg, 2011, Vol. 358, pp. 1–76.
10. Grąbczewski K, **Unified View of Decision Tree Learning Machines for the Purpose of Meta-learning**, In: Computer Recognition Systems 4, Editors: Burduk R, Kurzyński M, Woźniak M, Żołnierk A, Advances in Intelligent and Soft Computing, Springer Berlin / Heidelberg, 2011, Vol. 95, pp. 147–155.

Reviewed articles:

1. Paulson L, Grąbczewski K (1996) **Mechanizing Set Theory - Cardinal Arithmetic and the Axiom of Choice**. Journal of Automated Reasoning 17, pp. 291-323.
2. Duch W, Adamczak R, Grąbczewski K (1998) Extraction of logical rules from backpropagation networks, Neural Processing Letters 7, pp. 1-9.
3. Duch W, Adamczak R, Grąbczewski K, Żal G (1999) **Hybrid neural-global minimization method of logical rule extraction**, Int. Journal of Advanced Computational Intelligence.
4. Duch W, Adamczak R, Grąbczewski K, Jankowski N, **Neural methods of knowledge extraction**, Control and Cybernetics 29 (4) (2000), pp. 997-1018.
5. Duch W, Adamczak R, Grąbczewski K, **A new methodology of extraction, optimization and application of crisp and fuzzy logical rules**. IEEE Transactions on Neural Networks 12 (2001), pp. 277-306.
6. Duch W, Adamczak R, Grąbczewski K (1996) **Extraction of logical rules from training data using backpropagation networks**, The 1st Online Workshop on Soft Computing, 19-30.Aug.1996, pp. 25-30.
7. Duch W, Adamczak R, Grąbczewski K (1996) Extraction of logical rules from training data using backpropagation networks CAI'96, First Polish Conference on Theory and Applications of Artificial Intelligence, Łódź, 19-21.12.1996, pp. 171-178
8. Duch W, Adamczak R, Grąbczewski K (1996). **Constrained backpropagation for feature selection and extraction of logical rules**, CAI'96, First Polish Conference on Theory and Applications of Artificial Intelligence, Łódź, 19-21.12.1996, pp. 163-170.
9. Duch W, Adamczak R, Grąbczewski K, Constrained MLP and density estimation for extraction of crisp logical rules from data. ICONIP'97, New Zealand, Nov.1997, pp. 831-834.
10. Duch W, Adamczak R, Grąbczewski K (1997) Extraction of crisp logical rules using constrained backpropagation networks, International Conference on Artificial Neural Networks (ICNN'97), Houston, 9-12.6.1997, pp. 2384-2389.
11. Duch W, Adamczak R, Grąbczewski K, Ishikawa M, Ueda H (1997). **Extraction of crisp logical rules using constrained backpropagation networks - comparison of two new approaches**, European Symposium on Artificial Neural Networks (ESANN'97), Bruges 16-18.4.1997, pp. 109-114.
12. Duch W, Adamczak R, Grąbczewski (1997) Logical rules for classification of medical data using ontogenetic neural algorithm. Solving Engineering Problems with Neural Networks, International Conference EANN'97, Stockholm, 16-18.06.1997, pp. 199-202.
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14. Duch W, Adamczak R, Grąbczewski K, Jankowski N, Żal G, Medical diagnosis support using neural and machine learning methods, International Conference EANN'98, Gibraltar, 10-12.06.1998, pp. 292-295.
15. Duch W, Adamczak R, Grąbczewski K, Żal G, Hybrid neural-global minimization logical rule extraction method for medical diagnosis support, Intelligent Information Systems VII, Malbork, Poland, 15-19.06.1998, pp. 85-94.
16. Duch W, Adamczak R, Grąbczewski K, Żal G, **A hybrid method for extraction of logical rules from data**. Second Polish Conference on Theory and Applications of Artificial Intelligence, Łódź, 28-30 Sept. 1998, pp. 61-82.
17. Duch W, Adamczak R, Grąbczewski K (1999) **Neural optimization of linguistic variables and membership functions**. International Conference on Neural Information Processing (ICONIP'99), Perth, Australia, Nov. 1999, Vol. II, pp. 616-621.
18. Duch W, Adamczak R, Grąbczewski K (1999) **Neural methods for analysis of psychometric data**, International Conference EANN'99, Warsaw, 13-15.09.1999, pp. 45-50.
19. Duch W, Adamczak R, Grąbczewski K (1999) **Optimization of logical rules derived by neural procedures**, 1999 International Joint Conference on Neural Networks, Washington, July 1999, paper no. 741.
20. Duch W, Grąbczewski K (1999) **Searching for optimal MLP**, 4th Conference on Neural Networks and Their Applications, Zakopane, May 1999, pp. 65-70.
21. Grąbczewski K, Duch W (1999) **A general purpose separability criterion for classification systems**, 4th Conference on Neural Networks and Their Applications, Zakopane, May 1999, pp. 203-208.
22. Duch W, Adamczak R, Grąbczewski K (1999) **Methodology of extraction, optimization and application of logical rules**, Intelligent Information Systems VIII, Ustroń, Poland, 14-18.06.1999, pp. 22-31.
23. Grąbczewski K, Duch W, **The separability of split value criterion**. 5th Conference on Neural Networks and Soft Computing, Zakopane, June 2000, pp. 201-208.
24. Duch W, Grąbczewski K, Adamczak R, Grudziński K, Hippe Z.S. (2001) **Rules for melanoma skin cancer diagnosis**. KOSYR, Wrocław 2001, pp. 59-68.
25. Duch W, Grąbczewski K, **Heterogeneous adaptive systems**. World Congress of Computational Intelligence, 2002.
26. Grąbczewski K, Duch W, **Heterogeneous forests of decision trees**. International Conference on Artificial Neural Networks (ICANN) 2002.
27. Duch W, Winiarski T, Grąbczewski K, Biesiada J, Kachel A, Feature selection based on information theory, consistency and separability indices. International Conference on Neural Information Processing (ICONIP), Vol. IV, pp. 1951-1955, Singapore 2002.
28. Grąbczewski K, Jankowski N, **Transformations of symbolic data for continuous data oriented models**. International Conference on Artificial Neural Networks/International Conference on Neural Information Processing (ICANN/ICONIP) 2003.
29. Jankowski N, Grąbczewski K, Toward optimal SVM. Artificial Intelligence and Applications (AIA) 2003.
30. Grąbczewski K, **SSV Criterion based discretization for Naive Bayes Classifiers**. Artificial Intelligence and Soft Computing – ICAISC 2004, Lecture Notes in Artificial Intelligence, pp. 574-579.
31. Grąbczewski K, Jankowski N, **Feature Selection with Decision Tree Criterion**, Fifth International conference on Hybrid Intelligent Systems, Rio de Janeiro, Brasil, 2005, pp. 212-217.

32. Jankowski N, Grąbczewski K, *Heterogenous Committees with Competence Analysis*, Fifth International conference on Hybrid Intelligent Systems, Rio de Janeiro, Brasil, 2005, pp. 417–422.
33. Duch W, Jankowski N, Grąbczewski K, *Computational intelligence methods for information understanding and information management*, The 4th International Conference on Information and Management Sciences (IMS2005), Kunming, China, 2005, pp. 281–287.
34. Grąbczewski K, Jankowski N, *Meta-learning architecture for knowledge representation and management in computational intelligence*, International Journal of Information Technology and Intelligent Computing, vol.2 no.2, 2007.
35. Grąbczewski K, Jankowski N, *Versatile and Efficient Meta-Learning Architecture: Knowledge Representation and Management in Computational Intelligence*, IEEE Symposium Series on Computational Intelligence (SSCI 2007), Honolulu, pp. 51–58.
36. Jankowski N, Grąbczewski K, *Handwritten Digit Recognition — Road to Contest Victory*, IEEE Symposium Series on Computational Intelligence (SSCI 2007), Honolulu, pp. 491–498.
37. Jankowski N, Grąbczewski K, *Gained knowledge exchange and analysis for meta-learning*, Proceedings of International Conference on Machine Learning and Cybernetics, IEEE Press, 2007, pp. 795–802.
38. Grąbczewski K, Jankowski N, *Control of complex machines for meta-learning in computational intelligence*. Computational Intelligence, Man-Machine Systems and Cybernetics, 2007, pp. 287–293.
39. Grąbczewski K, Jankowski N, *Meta-learning with machine generators and complexity controlled exploration*. Artificial Intelligence and Soft Computing, Lecture Notes in Artificial Intelligence, Springer, Vol. 5097, 2008, pp. 545–555.
40. Jankowski N, Grąbczewski K, *Building meta-learning algorithms basing on search controlled by machine complexity*. IEEE World Congress on Computational Intelligence, Hong Kong, 1-6 June 2008, pp. 3600–3607.
41. Jankowski N, Grąbczewski K, *Increasing efficiency of data mining systems by machine unification and double machine cache*, Artificial Intelligence and Soft Computing, Lecture notes in computer science, Springer, 2010, pp. 380–387.
42. Grąbczewski K, Jankowski K, *Task Management in Advanced Computational Intelligence System*, Artificial Intelligence and Soft Computing, Lecture notes in computer science, Springer, 2010, pp. 331–338.
43. Grąbczewski K, Jankowski N, *Saving time and memory in computational intelligence system with machine unification and task spooling*, Knowledge-Based Systems, Elsevier Science Publishers, Amsterdam, 2011, Vol. 24, Issue 5, pp. 570–588.
44. Grąbczewski K, *Separability of Split Value Criterion with Weighted Separation Gains*, Lecture Notes in Computer Science, Springer Berlin / Heidelberg, 2011, Vol. 6871, pp. 88–98.
45. Grąbczewski K, *Validated Decision Trees versus Collective Decisions*, Computational Collective Intelligence. Technologies and Applications, Lecture Notes in Computer Science, Springer Berlin / Heidelberg, 2011, Vol. 6923, pp. 342–351.

Non-reviewed publications:

1. Duch W, Adamczak R, Grąbczewski K, Grudziński K, Jankowski N, Naud N, Extraction of knowledge from data using Computational Intelligence methods. In: ICONIP-2000,

- 7th International Conference on Neural Information Processing, Nov. 2000, Dae-jong, Korea (tutorial, separate brochure, 54 pp).
2. Duch W, Adamczak R, Grąbczewski K, Grudziński K, Jankowski N, Naud N, Understanding the data: extraction, optimization and interpretation of logical rules. In: International Joint Conference on Neural Networks 2000 (IJCNN) (tutorial, separate brochure, 70 pp).
 3. Duch W, Adamczak R, Grąbczewski K, Grudziński K, Jankowski N, Naud N, Extraction of Knowledge from Data using Computational Intelligence Methods. In: International Conference on Artificial Neural Networks (ICANN), Vienna, 21-25.08.2001 (tutorial, separate brochure, 63 pp).
 4. Grąbczewski K, and Jankowski N, **Meta-learning as scheme-based search with complexity control**. International Joint Conference on Neural Network. Workshop on Meta-Learning. 2007, pp. 3-8.
 5. Duch W, Grąbczewski K, and Jankowski N, **Meta-learning tutorial**. International Conference on Artificial Intelligence and Soft Computing. 2010.

Technical reports

1. Paulson L, Grąbczewski K, Mechanizing Set Theory: Cardinal Arithmetic and the Axiom of Choice, Technical Report no. 377, Computer Laboratory, University of Cambridge, UK.