

## REFEREED PUBLICATIONS

### BOOK CHAPTERS:

Verma, B., Zhang, P. and Kumar, K. (2006), A Hybrid Approach Based on Genetic Algorithms in Conjunction with Statistical Methods for the Diagnosis of Breast Cancer in Advanced Computational Methods for Biocomputing and Bioimaging, Editors: Tuan D. Pham, Hong Yan, Denis I. Crane, Nova Science Publishers, New York, Chapter 8, 167-188.

### JOURNAL ARTICLES:

Gerrald,J., Keijzers, G., Zhang, P., Vossen, C. and MacBeth, D. (2009), Clinical Diagnostic Criteria for Isolation Patients Admitted in Hospital with Suspected pandemic Influenza, The Lancet, Vol 374, 1673.

Pappalardo, F., Halling-Brown, M., Rapin, N, Zhang, P. Alemani, D., Emerson, P., Duroux, P., Pennisi, M., Palladini, A., Miotto, O., Churchill, D. Rossi, E., Shepherd, A., Moss, D., Castiglione, F., Bernaschi, M., Lefranc, M., Brunak, S., Motta, S., Lollini, P-L., Basford, K. and Brusic, V. (2009), ImmunoGrid, An Integrative Environment for Large-Scale Simulation of the Immune System for Vaccine Discovery, Design and Optimization. Briefings in Bioinformatics, Vol 10, Issue 3, 330-340.

Zhang, P., Brusic, V and Basford, K. (2009), A hybrid model for prediction of peptide binding to MHC molecules. Lecture Notes in Computer Science, Vol 5506, 528–535.

Pappalardo, F., Zhang, P., Halling-Brown, M., Basford,K., Scalia,A., Shepherd,A., Moss,D., Motta,S., Brusic,V. (2008), Computational simulations of the immune system for personalized medicine: state of the art and challenges. Current Pharmacogenomics and Personalized Medicine, Vol 6, Issue 4, 260-271.

Pennisi, M., Pappalardo, F., Zhang, P. and Motta, S. (2009), An Application of Genetic Algorithms in Cancer Immunoinformatics, IEEE Engineering in Medicine and Biology Magazine, Vol 28, Issue 4, 67-72.

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Zhang, P., Verma, B. and Kumar, K. (2005), Neural vs. Statistical Classifier in Conjunction with Genetic Algorithm Based Feature Selection, Pattern Recognition Letters, Vol 26, 909-919.

Verma, B. and Zhang, P. (2007), A Novel Neural-Genetic Algorithm to Find the Most Significant Combination of Features in Digital Mammograms, Applied Soft Computing, Vol 7, Issue 2, 612-625.

## CONFERENCE PAPERS:

Zhang, P., Kumar, K.(2006), Analyzing Feature Significance from Various Systems for Mass Diagnosis, Proceedings of International Conference on Computational Intelligence for Modeling Control and Automation and International Conference on Intelligent Agents Web Technologies and International Commerce (CIMCA'06), 141, DOI: 10.1109/CIMCA.2006.46.

Kumar. K., Zhang, P. and Verma, B. (2006). Application of Decision Trees for Mass Classification in Mammography, Proceedings of the 3rd International Conference on Fuzzy Systems and Knowledge Discovery(FSKD'06), Xi'an China, Advances in Natural Computation and Data Mining, 366-376.

Zakos, J., Zhang, P. and Verma, B. (2005), Optimization of Parameters for Effective Web Information Retrieval Using an Evolutionary Algorithm, Proceedings of IEEE International Joint Conference on Neural Networks 2005, 582-587

Zhang, P. Verma, B. and Kumar, K. (2004), A Neural-genetic Algorithm for Feature Selection and Breast Abnormality Classification in Digital Mammography, Proceedings of IEEE International Joint Conference on Neural Networks 2004, 2303-2309,

Zhang, P., Verma, B. and Kumar, K. (2003), Neural vs Statistical Classifier in Conjunction with Genetic Algorithm Feature Selection in Digital Mammography, IEEE Congress on Evolutionary Computation, Volume 2, 1206-1213.

## Abstract and PRESENTATIONS:

P. Zhang, G. Etherington and V. Brusic, The European Virtual Human Immune System Project. Proceedings of Intern. Congress of Immunogenomics and Immunomics, p279, October 8-12, 2006, Budapest, Hugarly [Conference Proceedings Abstract, and Poster].

Zhang, P., Brusic, V and Basford, K., A hybrid model for prediction of peptide binding to MHC molecules, 15th International Conference on Neural Information Processing of the Asia-Pacific Neural Network Assembly, November 25-28, 2008, Auckland, New Zealand [Poster].

P. Zhang, An Application of Genetic Algorithms in Cancer Immunoinformatics, Second IAPR International Workshop, Pattern Recognition in Bioinformatics, October 1-2, 2007, Singapore [Oral Presentation].

P. Zhang, Model Deconstruction of an Immunoprevention Vaccine, the 3rd International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'06), September 26, 2006, Xi'an China [Oral Presentation].

P. Zhang, Application of Decision Trees for Mass Classification in Mammography, the 2<sup>nd</sup> International Conference on Natural Computation and the 3<sup>rd</sup> International Conference on Fuzzy Systems and Knowledge Discovery (ICNC-FSKD'06), September 26, 2006, Xi'an China [Oral Presentation].

P. Zhang, A Hybrid Classifier for Mass Classification with Different Kinds of Features in Mammography, the 1st International Conference on Natural Computation and the 2nd International Conference on Fuzzy Systems and Knowledge Discovery (ICNC-FSKD'05), August 28, 2005, Changsha, China [Oral Presentation].

P. Zhang, An Artificial Intelligence Technique for Microcalcification Detection and Diagnosis in Breast Cancer, Diversity in Practice: The Voice of Vietnamese Australian Women, the Sixth National Conference, 2004, Brisbane [invited Oral Presentation]

P. Zhang, Neural vs Statistical Classifier in Conjunction with Genetic Algorithm Feature Selection in Digital Mammography, The 2003 IEEE Congress on Evolutionary Computation (CEC'03), December 8, Canberra, Australia [Oral Presentation]