

Novi Quadrianto

Am Campus 1
3400 Klosterneuburg, Austria
☎ +43 69910484284
✉ novi.quadrianto@gmail.com



Education

- Jan 2008 - **Ph.D. in Computer Science**,
Nov 2011 *Australian National University, Canberra, Australia*,
Thesis: Learning for the Internet: Kernel Embeddings and Optimisation
Advisors: Alex Smola, Christoph Lampert, Dale Schuurmans, Tiberio Caetano, and Wray Buntine.
Thesis was accepted unconditionally (without any changes)
- Feb 2007 - **Master in ICT**,
Dec 2007 *Australian National University, Canberra, Australia*,
Specialization: statistical machine learning.
- Jun 2001 - **Bachelor in Electrical and Electronic Engineering (1st Class Honours)**,
Jun 2005 *Nanyang Technological University, Singapore*,
Thesis: Brain-Computer Interface
Advisors: Guan Cuntai and Wan Chunru.
Thesis was awarded Silver Prize

Research Interest

Statistical machine learning, Kernel methods, Nonparametric Bayesian statistics, Exponential family, Probabilistic graphical model
Applications: the Internet, Computer vision, Visualization, Neural signal processing

Honors & Awards

- 2012 - 2014 **Newton International Fellowship**.
2011 - **Isaac Newton Institute for Mathematical Sciences, Junior Member**.
2009 **Microsoft Research Asia Fellowship**.
2007-2011 **ANU-NICTA Tuition, Stipend, Assignment, and Supplementary Scholarship**, *Australian National University, Australia*.
Travel Awards, *ANU Vice-Chancellor HDR (2008,2009,2010), NIPS (2008,2009,2010), ICML (2008,2011)*.
2005 **A*STAR (Agency for Science, Technology and Research) Graduate Scholarship**, *Nanyang Technological University, Singapore*.
2005 **Silver Prize, Best Undergraduate Project in College of Engineering Technology Week Exhibition**, *Nanyang Technological University, Singapore*.
2002 - 2005 **Dean's List**, *Nanyang Technological University, Singapore*.

Research Experience

- Mar 2011 - **Visiting Scientist**, *IST Austria*, Klosterneuburg, Austria.
Collaborating with the Lampert (Computer Vision and Machine Learning) Group
- Oct 2010 - **Research Intern**, *IST Austria*, Klosterneuburg, Austria.
Jan 2011 Researching on a multi-view neighborhood preserving projection for image features generation (host: Prof. Christoph Lampert)
- Aug 2010 - **Visiting Scholar**, *Fraunhofer IAIS*, Sankt Augustin, Germany.
Sep 2010 Exploring belief propagation based max-flow algorithm (host: Kristian Kersting)
- Jan 2010 - **Visiting Scholar**, *University of Alberta*, Edmonton, Canada.
Mar 2010 Working on large-scale (min-cost) max-flow algorithm and exploring autoencoder based image feature generation (host: Prof. Dale Schuurmans)
- Aug 2009 - **Research Intern**, *Yahoo! Research*, Santa Clara, CA, US.
Nov 2009 Implementing Yahoo! page cache system (Machine Learning, host: Prof. Alex Smola; Search Science, host: Kostas Tsioutsoulklis)
- Feb 2009 **Visiting Scholar**, *Helsinki Institute for Information Technology (HIIT)*, Helsinki, Finland.
Exploring kernelized sorting based image browser (Complex Systems Computation, host: Prof. Petri Myllymäki); taxonomy based activity recognition and Gaussian processes based rating predictor (Adaptive Computing, host: Patrik Floréen)
- Aug 2005 - **Research Officer**, *Institute for Infocomm Research (I²R)*, Singapore.
Aug 2006 Carrying out research in EEG source localization, common spatial pattern analysis, and wavelet decomposition method

Publications

- 2011 Novi Quadrianto and Christoph H. Lampert, Learning Multi-View Neighborhood Preserving Projections, International Conference on Machine Learning (**ICML**)
- 2011 Novi Quadrianto and Christoph H. Lampert, Kernel-based Learning, Encyclopedia of Systems Biology, Werner Dubitzky, Olaf Wolkenhauer, Kwang-Hyun Cho, Hiroki Yokota (Eds.), Springer
- 2010 Novi Quadrianto, Alex J. Smola, Le Song, and Tinne Tuytelaars, Kernelized Sorting, IEEE Trans. on Pattern Analysis and Machine Intelligence (**PAMI**)
- 2010 W. P. Malcolm, Novi Quadrianto, and Lakhdar Aggoun, State Estimation Schemes for Independent Component Coupled Hidden Markov Models, Journal of Stochastic Analysis and Applications
- 2010 Novi Quadrianto, Alex J. Smola, Tiberio S. Caetano, S.V.N. Vishwanathan, and James Peterson, Multitask Learning without Label Correspondences, Advances in Neural Information Processing Systems (**NIPS**)
- 2010 Gilbert Leung, Novi Quadrianto, Alex J. Smola, and Kostas Tsioutsoulklis, Optimal Web-scale Tiering as a Flow Problem, Advances in Neural Information Processing Systems (**NIPS**)
- 2010 Novi Quadrianto, Kristian Kersting, Tinne Tuytelaars, and Wray L. Buntine, Beyond 2D-Grids: A Dependence Maximization View on Image Browsing, ACM International Conference on Multimedia Information Retrieval (**MIR**)
- 2010 Novi Quadrianto, Kristian Kersting, and Zhao Xu, Gaussian Processes, Encyclopedia of Machine Learning, Claude Sammut and Geoff Webb (Eds.), Springer

- 2010 Novi Quadrianto and Wray L. Buntine, Regression, Encyclopedia of Machine Learning, Claude Sammut and Geoff Webb (Eds.), Springer
- 2010 Novi Quadrianto and Wray L. Buntine, Linear Regression, Encyclopedia of Machine Learning, Claude Sammut and Geoff Webb (Eds.), Springer
- 2010 Novi Quadrianto and Wray L. Buntine, Linear Discriminant, Encyclopedia of Machine Learning, Claude Sammut and Geoff Webb (Eds.), Springer
- 2009 Novi Quadrianto, Alex J. Smola, Tiberio S. Caetano, and Quoc V. Le, Estimating Labels from Label Proportions, Journal of Machine Learning Research (**JMLR**)
- 2009 Novi Quadrianto, James Petterson, and Alex J. Smola, Distribution Matching for Transduction, Advances in Neural Information Processing Systems (**NIPS**)
- 2009 Novi Quadrianto, Tiberio S. Caetano, John Lim, and Dale Schuurmans, Convex Relaxation of Mixture Regression with Efficient Algorithms, Advances in Neural Information Processing Systems (**NIPS**)
- 2009 Novi Quadrianto, Kristian Kersting, Mark D. Reid, Tiberio S. Caetano, and Wray L. Buntine, Kernel Conditional Quantile Estimation via Reduction Revisited, IEEE International Conference on Data Mining (**ICDM**)
- 2009 Akshay Asthana, Roland Goecke, Novi Quadrianto, and Tom Gedeon, Learning based Automatic Face Annotation for Arbitrary Poses and Expressions from Frontal Images Only, IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**)
- 2008 Novi Quadrianto, Le Song, and Alex J. Smola, Kernelized Sorting, Advances in Neural Information Processing Systems (**NIPS**)
- 2008 Novi Quadrianto, Alex J. Smola, Tiberio S. Caetano, and Quoc V. Le, Estimating Labels from Label Proportions, International Conference on Machine Learning (**ICML**)
- 2007 Novi Quadrianto, Guan Cuntai, Tran Huy Dat, and Xue Ping, Sub-Band Common Spatial Pattern (SBCSP) for Brain-Computer Interface, IEEE EMBS Conference on Neural Engineering

Demonstrations

- 2010 Globby: It's a Search Engine with a Sorting View (<http://globby.alwaysdata.net/>), NIPS, Vancouver, Canada

Patent Disclosures

Caching web documents in two or more caches. Assignee: Yahoo! Inc

Professional Services

Program Committee ICML 2012, PASCAL CWOP 2012, ICML 2011, CIKM 2011, IJCAI 2011, ICANN 2011

Reviewer JMLR, MLJ, TPAMI, DMKD, PR, BMC Bioinformatics, UAI 2011, ICML 2010, UAI 2010, ALT 2010