Curriculum Vitae: Joel Veness

Contact Information

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Work**:**	Ath-336, Athabasca Hall, University of Alberta
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Personal Statement

I am interested in the algorithmic and computational aspects of Artificial Intelligence, with a particular emphasis on scalable and efficient approaches for online Reinforcement Learning agents and machine learning for games. I consider myself a motivated, creative and approachable individual who enjoys working with others.

Publications

- J.Veness, K.S. Ng, M. Hutter, M. Bowling, *Context Tree Switching*, Data Compression Conference (DCC), 2012 (to appear).
- J. Veness, M. Lanctot, M. Bowling, *Variance Reduction in Monte-Carlo Tree Search*, Neural Information Processing Systems (NIPS), 2011.
- S. Legg and J. Veness, *An Approximation of the Universal Intelligence Measure*, Ray Solomonoff 85th Memorial Conference, 2011.
- J. Veness, K.S. Ng, M. Hutter, W. Uther, D. Silver, *A Monte Carlo AIXI Approximation*, Journal of Artificial Intelligence Research (JAIR), 2011.
- D. Silver, J. Veness, *Monte-Carlo Planning in Large POMDPs*, Neural Information Processing Systems (NIPS), 2010.
- J.Veness, K.S. Ng, M. Hutter, D. Silver, *Reinforcement Learning via AIXI Approximation*, Assoc. for the Advan. of Artificial Intelligence (AAAI), 2010.
- J. Veness, D. Silver, W. Uther, A. Blair, *Bootstrapping from Game Tree Search*, Neural Information Processing Systems (NIPS), 2009.
- J. Veness and A. Blair*, Effective Use of Transposition Tables in Stochastic Game Tree Search,* IEEE Symposium of Computational Intelligence and Games (CIG), 2007.

Awards / Achievements

- CiSRA Best Research Paper Prize (2009)
- Australian Postgraduate Award + NICTA Top-Up Scholarship
- 1st place in 2005 Australian Computer Chess Championships
- 17/65 in CCT6 (2004), 17/38 in CCT8 (2006), 24/54 in CCT9 (2007). CCT is an annual world-wide Computer Chess Tournament.
- UNSW Dean's Honours List (2004, 2005, 2006)
- UNSW Co-op Scholarship in Computer Science

Employment

Jan. 2006 - July 2007	National ICT Australia Symbolic Machine Learning and Knowledge Acquisition Research Engineer
July 2004 - Dec. 2005	Smarts Pty Ltd Software Engineer C/C++ server-side programming

Teaching Experience

- Teaching Assistant
  COMP3411 - Artificial Intelligence,
  Semester 1, 2008-2010,
  University of New South Wales.

Technical Skills

- Applied probability/information theory, reinforcement learning, game tree search, machine learning and statistics.
- Strong C/C++ programming skills.
- Experience with high-performance parallel programming techniques for shared memory architectures.
- Experience with various software engineering technologies
  (SVN, Visual Studio, Windows/Linux, TCP/IP, Perl, Lua, Lisp)

Education

- PhD (Computer Science),
  University of New South Wales,
  2007 - 2011.

- BSc (Computer Science) Honours Class 1,
  University of NSW, 2007.
  CSE WAM: 91/100.

Hobbies and Interests

- Tennis / Cricket
- Playing Chess , Texas Hold'em and Dominion
- Game AI (Computer Chess / Computer Go / General Game Playing)
- Data Compression
- Science Fiction