
David Vadas

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Work Experience

University of Sydney and Capital Markets CRC Building systems for analysing newspaper text as part of an industry partnership with Fairfax Digital. Other duties included lecturing and supervising students.	Nov 2010 – Aug 2011
Optiver Development work on multiple components of a high-frequency trading system. This includes writing software for monitoring speed and success, interpreting market protocols and an auto-trading tool.	Apr 2008 – Nov 2010
National Computer Science School, School of I.T. Tutoring Python programming to high school students.	Jan 2005 and 2006
Teacher Training Python Workshop Tutoring Python programming to high school teachers.	2004
Academic Staff, School of I.T. Tutoring a number of classes, with students from 1 st and 2 nd Year, through to honours and masters students.	2003 – 2005

Education

The University of Sydney Doctorate of Philosophy in Science <i>Noun Phrase Structure for Statistical Parsing</i> Greater annotation and analysis of noun phrase structure allows for better performance in parsing and other Natural Language Processing systems.	Mar 2005 – Apr 2008
Bachelor of Information Technology (Honours) First Class Honours in Computer Science – Grade: 88/100 (WAM: 80%) Majors in Software Development, Principles of Computer Science, and Networks and Systems.	Mar 2001 – Nov 2004
Honours Research Project <i>POS Tagging Unknown Words using an Unannotated Corpora and Maximum Entropy</i> This involved applying information from a very large corpora using real-valued features in a log-linear model.	

Technical Skills

- Programming languages: proficient with C++ and C, including use of Boost libraries. Also experienced with Python, Django and database usage through SQL (Microsoft SQL Server and PostgreSQL in particular).
- Development tools: Visual Studio, vim, git, Subversion, automated testing (using Boost Test), bjam, and assorted Linux utilities.
- Operating Systems: Linux/Unix and Windows.
- Expertise in the theory and practice of high frequency trading, machine learning, networking, and tasks from the computational linguistics field such as tagging and parsing.

Publications

David Vadas and James R. Curran

Parsing Noun Phrase Structure with CCG. In Proceedings of the 46th Annual Meeting of the Association of Computational Linguistics: Human Language Technologies (ACL-08: HLT). Columbus, OH, USA, June 15–20 2008.

David Vadas and James R. Curran

Parsing Internal Noun Phrase Structure with Collins' Models. In Proceedings of the Australasian Language Technology Workshop (ALTW-07), pages 109–116. Melbourne, Australia, December 10–11 2007.

David Vadas and James R. Curran

Large-Scale Supervised Models for Noun Phrase Bracketing. In Proceedings of the 10th Conference of the Pacific Association for Computational Linguistics (PACLING-2007), pages 104–112. Melbourne, Australia, September 19–21 2007.

David Vadas and James R. Curran

Adding Noun Phrase Structure to the Penn Treebank. In Proceedings of the 45th Annual Meeting of the Association for Computational Linguistics (ACL-07), pages 240–247. Prague, Czech Republic, June 23–30 2007.

James R. Curran, Stephen Clark, and **David Vadas**

Multi-Tagging for Lexicalized-Grammar Parsing. In Proceedings of the Joint Conference of the International Committee on Computational Linguistics and the Association for Computational Linguistics (COLING/ACL-06), pages 697–704. Sydney, Australia, July 17–21 2006.

David Vadas and James R. Curran

Tagging Unknown Words with Raw Text Features. In Proceedings of the Australasian Language Technology Workshop (ALTW-05), pages 32–39. Sydney, Australia, December 10–11 2005.

David Vadas and James R. Curran

Programming With Unrestricted Natural Language. In Proceedings of the Australasian Language Technology Workshop (ALTW-05), pages 191–199. Sydney, Australia, December 10–11 2005.

Research Experience

The University of Sydney

Research Assistant, School of I.T.

Nov 2004 – Jan 2005

Developed Intelligent Tutoring Systems (ITS)

Vacation Scholar, School of I.T. (Information Visualisation Group)

Nov 2003 – Mar 2004

Implemented process tree visualisation software

Awards & Achievements

Awarded William and Catherine McIlrath Scholarship

2007

Awarded Australian Bicentennial Scholarship

2007

Recipient of the Australian Postgraduate Award (APA)

2005 – 2008

Nominated for Soprano Prize (Best Honours Thesis)

2004

Recipient of Information Visualisation Group Vacation Scholarship, School of I.T.

2003

Placement on 3rd Year Honour Roll, School of I.T.

2003

Placement on 2nd Year High Honour Roll, School of I.T.

2002

Placement on 1st Year Honour Roll, School of I.T.

2001