Curriculum Vitae

Personal Details

Name: Mark DRAS

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Date of Birth: 8th April 1970 Nationality: Australian

Employment

Positions held

1999–2001: postdoctoral research fellow at the Institute for Research in Cognitive Science,

University of Pennsylvania

1997—: associate lecturer in computer science at Macquarie University (on leave)

1991–1996: casual lecturer/tutor in computing and financial mathematics at Macquarie Uni-

versity

Teaching experience

COMP432:	honours/maste	rs level unit i	n computational linguistics,	covering Prolog DCGs.
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graph unification, grammar formalisms, etc

COMP 329: third-year AI unit covering logic, Prolog, neural networks, introduction to com-

putational linguistics

COMP 323: third-year unit in numerical optimisation, covering linear programming, network

flow models, transport models, etc

COMP 238: second-year numerical analysis unit, covering numerical approximations for finding

roots, curve fitting, solving of differential equations, etc

COMP 225: second-year unit in data structures and algorithms, covering complexity, correct-

ness, graph algorithms, etc

COMP 125: first-year unit covering computer science fundamentals such as search and sorting

COMP 124: first-year introduction to programming and information systems

COMP123: service unit for non-computer science students covering applications such as

spreadsheets and databases

ACST101: first-year unit covering basic financial mathematics, such as valuation of financial

instruments

misc: C++ course to industry

Research supervision

Brendan Reville, honours research project entitled *Genetic Programming in a Co-Evolutionary Environment*; gained honours class I and Lucent Prize (best performance in computing honours year)

Education

1993–1999: PhD in Computer Science

supervised by A/Prof Robert Dale and A/Prof Mike Johnson

thesis: Tree Adjoining Grammar and the Reluctant Paraphrasing of Text

1989–1992: B.Sc. in Computing (honours class I), Macquarie University

supervised by A/Prof Mike Johnson

1988–1990: B.Ec. in Actuarial Mathematics, Macquarie University

Scholarships, Awards and Grants

2000: French Institute for Culture and Technology grant (\$US1500)

1999: Macquarie University New Staff grant (\$A6000) 1997: Macquarie University Research Fellowship (\$A2500)

1993–1996: Australian Postgraduate Award, to undertake PhD (\$A15000 p.a.)

Microsoft Fellowship, to undertake PhD (\$A20000 p.a.)

1992: Hitachi scholarship for academic achievement, to undertake honours (\$A3000)

1990: shared GIO prize for Institutional Investment (\$A500) shared NRMA prize for General Insurance (\$A500)

1988–1990: AMP scholarship, to undertake B.Ec. (\$A10000 p.a.)

Service and Community Activities

2000–2001: program committee for North American Association for Computational Linguis-

tics (NAACL)

2000: program committee for International Conference on Computational Linguistics

(COLING)

1998–2001: program committee for Association for Computational Linguistics (ACL) student

session

1999: honours year convenor in Macquarie University's Dept of Computing

1998–1999: member of Dept of Computing's Teaching Committee

1997: developed Dept of Computing's Teaching Plan with Ros Ballantyne and others 1994–1995, 1997: member of Macquarie's Postgraduate Studies Committee (also student matters

subcommittee, 1997)

Language Competencies

Programming: Prolog, C, C++, Objective C, SWARM, Lisp, Pascal, Perl, Matlab, various Unix

shells

Natural: native language is English

working knowledge of French

some knowledge of Spanish, Italian and Korean

Interests

reading, squash, travelling, bridge, badminton, theatre, AFL

Selected Refereed Publications

Mark Dras, David Chiang and William Schuler [to appear 2001] On Relations of Constituency and Dependency Grammars. *Journal of Language and Computation*. Hermes Science Publishers, Paris, France.

William Schuler, David Chiang and Mark Dras [2000] Multi-Component TAG and Notions of Formal Power. Proceedings of the Thirty-Eighth Annual Meeting of the Association for Computational Linguistics (ACL'00), 448–455. Hong Kong, China.

Mark Dras, David Chiang and William Schuler [2000] A Multi-Level TAG Approach to Dependency. *Proceedings of the Workshop on Linguistic Theory and Grammar Implementation*, 33–46. Birmingham, UK.

Mark Dras and Tonia Bleam [2000] How Problematic are Clitics for S-TAG Translation? Proceedings of the Fifth International Workshop on Tree Adjoining Grammars and Related Formalisms (TAG+5), 241–244. Paris, France.

David Chiang, William Schuler and Mark Dras [2000] Some Remarks on an Extension of Synchronous TAG. Proceedings of the Fifth International Workshop on Tree Adjoining Grammars and Related Formalisms (TAG+5), 61–66. Paris, France.

Mark Dras [1999] Tree Adjoining Grammar and the Reluctant Paraphrasing of Text. PhD thesis, Macquarie University, Australia.

Mark Dras [1999] A Meta-Level Grammar: Redefining Synchronous TAG for Translation and Paraphrase. Proceedings of the Thirty-Seventh Annual Meeting of the Association for Computational Linguistics (ACL'99), 80–87. Maryland, USA.

Mark Dras [1999] Synchronous Parallelism Between Different Grammar Formalisms. *Proceedings of the Sixth Meeting on the Mathematics of Language*. Orlando, USA.

Mark Dras [1998] Search in Constraint-Based Paraphrasing. Natural Language Processing and Industrial Applications (NLP+IA98), 213–219. Moncton, Canada.

Mark Dras [1997] Representing Paraphrases Using S-TAGs. Proceedings of the Thirty-Fifth Meeting of the Association for Computational Linguistics (ACL-EACL97), 516–518. Madrid, Spain.

Mark Dras [1997] Reluctant Paraphrase: Textual Restructuring under an Optimisation Model. Proceedings of the Third Meeting of the Pacific Association for Computational Linguistics (PA-CLING'97), 98–104. Ohme, Japan.

Mark Dras and Mike Johnson [1996] Death and Lightness: Using a Demographic Model to Find Support Verbs. Proceedings of the 5th International Conference on the Cognitive Science of Natural Language Processing. Dublin, Ireland.

Referees

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Associate Professor Robert Dale Department of Computing Macquarie University NSW. 2109. Australia.

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