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SCHOOL OF INFORMATION TECHNOLOGIES UNIVERSITY OF SYDNEY, NSW 2006, AUSTRALIA

EMPLOYMENT

September 2013 - Present

University of Sydney

(Last updated: 16 April 2014)

DECRA Research Fellow, School of Information Technologies Role: Early career researcher funded by Australian Research Council.

Software: The project will improve the coverage and reliability of collaborative resources (e.g., Wikipedia), building high-performance tools for linking text to entity KBs and using them to develop comprehensive relation extraction and fact-driven summarisation.

December 2011 - September 2013

Thomson Reuters

Senior Research Scientist, Research & Development

Role: Initiate/lead R&D in large-scale language technology for professional content. **Software:** Induction of financial risk taxonomies, identifying extended entity types in legal text, linking entities across content, text-driven automation of master data management. **Other:** Consult on, e.g., linked data, Wikipedia, NER in queries, biography generation,

patent summarisation, data science and evaluation. Manage machine-learning intern.

October 2008 - October 2011

Macquarie University

Research Fellow, Centre for Language Technology

Role: R&D in language technology for financial analytics and news curation.

Software: Tera-scale text mining tools for fraud detection, algorithmic decision-making, and automated news curation.

November 2002 - September 2004

University of Edinburgh

Research Associate, Institute for Communicating and Collaborative Systems
Role: Drove research agenda on several information extraction and summarisation projects.
Software: State-of-the-art active learning tools for information extraction (optioned to Cognia Corporation).

EDUCATION

January 2009

University of Edinburgh

PhD, Informatics (supervisor: Claire Grover) **Thesis:** Towards Generic Relation Extraction

Edinburgh-Stanford Link PhD Studentship

Autumn 2002

University of Edinburgh

MSc, Speech and Language Processing (supervisor: Mirella Lapata)

Thesis: Recognising Clauses Using Symbolic and Machine Learning Approaches

Spring 2001

University of Minnesota

B.A., Computer Science and Linguistics (Spanish minor)

Double major with coursework emphasis on Computational Linguistics, Syntax and AI.

SUPERVISION

PhD: Andrew Chisholm; Joel Nothman, (2013, associate); Will Radford (2013, associate) **Honours/MSc:** Ka Shing Law (2010, Honours); Gareth Robinson (2010, Honours); Will Radford (2009, Honours, first class); Tamsin Maxwell (2007, MSc, distinction,)

TEACHING

Guest/Lecturer: Statistical Natural Language Processing (2010-11, Honours, USydney) Teaching Assistant: XML Document Management (2005-07, Masters, UEdinburgh, with Henry Thompson); Processing Natural and Formal Languages (2005-06, Undergraduate, UEdinburgh, with Bonnie Webber); Introduction to Computational Linguistics (2003, Masters, UEdinburgh, with Ewan Klein); Introduction to Syntax (2001, Undergraduate, UMinnesota, with Hooi Ling Soh)

RESEARCH INTERESTS

Computational linguistics; Machine learning; Information extraction; Data integration.

FUNDING

Wikilinks (2013-2016, Australian Research Council, principal investigator) Computable News (2010-2011, Fairfax/CMCRC, author & project lead) EASIE (2004-2007, Edinburgh-Stanford Link, named student)

SERVICE

Reviewing: Journal of artificial intelligence research, Language resources and evaluation, Information processing and management, Natural language engineering, etc.

Conference PCs: ACL, EMNLP, COLING, NAACL, SIGIR, etc.

Organisation: NAACL workshop on computational linguistics in a world of social media; Finding the hidden knowledge: text mining for biology and medicine.

TECHNICAL SKILLS

Various programming languages (e.g., Python, Perl, Java, C/C++, XSLT) Various data management tools (e.g., MongoDB, Tokyo Cabinet, PostgreSQL, Django) System/corpus design and development (e.g., IE, Summarisation, QA) Evaluation tools (e.g., https://github.com/wikilinks/conll03_nel_eval) Various language/speech and machine learning tools (e.g., LT TTT, NLTK, Weka, R) Spanish (minor, UMinnesota), Ojibwe (1 year, UMinnesota)

SELECTED PUBLICATIONS

(Citation counts from Google Scholar. Current h-index: 12.)

Evaluating entity linking with Wikipedia. **B. Hachey**, W. Radford, J. Nothman, M. Honnibal and J. R. Curran. *Artificial Intelligence*, 193: 130-150, 2013. (Citations: 19)

Event linking: grounding event reference in a news archive. J. Nothman, M. Honnibal, **B. Hachey** and J. Curran. In *ACL*, pages 228-232, 2011. (Citations: 3)

Graph-based named entity linking with Wikipedia. **B. Hachey**, W. Radford and J. Curran. In *WISE*, pages 213-226, 2011. (Citations: 8)

Document-level entity linking: CMCRC at TAC 2010. W. Radford, **B. Hachey**, J. Nothman, M. Honnibal and J. R. Curran. In *Proceedings of the Text Analysis Conference*, 2010. (Citations: 16)

Multi-document summarisation using generic relation extraction. **B. Hachey**. In *EMNLP*, pages 420-429, 2009. (Citations: 12)

Tracking information flow in financial text. W. Radford, **B. Hachey**, J. R. Curran and M. Milosavljevic. In *ALTW*, pages 11-19, 2009. (Citations: 3)

Extractive summarisation of legal texts. **B. Hachey** and C. Grover. *Artificial Intelligence and Law*, 14(4):305-345, 2006. (Citations: 33)

Investigating the effects of selective sampling on the annotation task. **B. Hachey**, B. Alex and M. Becker. In *CoNLL*, pages 144-151, 2005. (Citations: 35)

Optimising selective sampling for bootstrapping named entity recognition. M. Becker, **B. Hachey**, B. Alex and C. Grover. In *ICML Workshop on Learning with Multiple Views*, pages 5-12, 2005. (Citations: 29)

A rhetorical status classifier for legal text summarisation. **B. Hachey** and C. Grover. In *ACL Text Summarization Branches Out Workshop*, pages 35-42, 2004. (Citations: 13)

Use of ontologies for cross-lingual information management in the web. **B. Hachey**, C. Grover, V. Karkaletsis, A. Valarakos, M.-T. Pazienza, M. Vindigni, E. Cartier and J. Coch. In *Workshop on Ontologies and Information Extraction*, 2003. (Citations: 11)

The Embra system at DUC 2005: query-oriented multi-document summarization with a very large latent semantic space. **B. Hachey**, G. Murray and D. Reitter. In *Proceedings of the Document Understanding Conference*, 2005. (Citations: 25)