

Prof. Hamish Cunningham

– Curriculum Vitæ

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1 Career History

Research Professor Department of Computer Science, University of Sheffield (original appointment 1995).

Chaire d'Excellence Agence Nationale de la Recherche Chaire d'Excellence at the Internet Memory Foundation, Paris, (2011-2012).

Visiting Professor (2009) Université Joseph Fourier, Grenoble.

Visiting Scientist (2005 to 2006) Digital Enterprise Research Institute, National University of Ireland at Galway.

Research Associate (1991 to 1995) Centre for Computational Linguistics, University of Manchester Institute of Science and Technology (UMIST).

Lecturer (1993-4) in Computing (part-time), University College Salford.

Programmer (1988-1990) with S.A.M. Systems Ltd., Manchester.

Sound Engineer (1984-1985) with Woodbine Street Recording Studio, Leamington Spa.

2 Research Funding

My research has been funded by: EPSRC, BBSRC, AHRC, JISC, the EU, the NHS, ANR, the crowd (on Kickstarter) and industry.

Project	Role	Duration	Agency
SoBigData ¹	PI ²	2015-2019	EC
EU Aquaponics Hub ³	MCM ⁴	2014-2018	EC
MLi ⁵	PI	2013-2015	EC
ForgetIT ⁶	PI	2013-2015	EC
AnnoMarket ⁷	Cd/PI ⁸	2012-2014	EC
NuAGES ⁹	PI	2011-2013	ANR
Arcomem ¹⁰	Cd/PI	2011-2013	EC
SLaM/IE-2	CI ¹¹	2011	NHS
GATE Cloud	PI	2011	EPSRC/JISC
Khresmoi ¹²	PI	2010-2014	EC
SLaM/IE	CI	2010	NHS/BearingPoint
SAM-3	PI	2009-10	MatrixWare/IRF
TextVRE	CI	2009-2011	JISC
LarKC ¹³	PI	2008-2011	EC
SAM-2	PI	2008-9	MatrixWare/IRF
ServiceFinder	CI	2008-2010	EC
SAM-1 ¹⁴	PI	2007	MatrixWare/IRF
GATE/UIMA	PI	2005-6	IBM
NEON	PI	2006-2010	EC
MediaCampaign	PI	2006-2008	EC
MUSING	CA ¹⁵	2006-2010	EC
TAO	CA	2006-2008	EC
LIRICS ¹⁶	PI	01/2005-06/2007	EC

¹<http://project.sobigdata.eu/>

²Principal Investigator.

³<http://euaquaponicshub.com/>

⁴Management Committee Member.

⁵<http://www.mli-project.eu/>

⁶<http://www.forgetit-project.eu/>

⁷<http://www.annomarket.eu/>

⁸Project Coordinator; Principal Investigator.

⁹New cloud Architecture for General Extraction Services.

¹⁰Memory institutions in the e-Social age.

¹¹Co-Investigator.

¹²Knowledge Helper for Medical and Other Information users.

¹³Large Knowledge Collider.

¹⁴Semantic Annotation for Matrixware.

¹⁵Co-Author.

¹⁶Linguistic Infrastructure for Interoperable Resources and Systems.

Project	Role	Duration	Agency
SEKT ¹⁷	PI	01/2004-12/2006	EC
PrestoSpace ¹⁸¹⁹	PI	01/2004-04/2007	EC
KnowledgeWeb	PI	01/2004-12/2007	EC
MMKM ²⁰	FM ²¹	01/2004-12/2006	EPSRC
ETCSL ²²	PI	10/2003-09/2006	AHRC
Multiflora II	PI	2002-2003	BBSRC
h-TechSight ²³	PI	2001-2004	EC
EnIRaF (Marie Curie)	PI	2004-2007	EC
HealthIE	PI	2001-2002	HSL Lab
OntoWeb network	PI	2001-2003	EC
Old Bailey IE	PI	2002	Internal
AKT ²⁴	CI	2000-2006	EPSRC
MUMIS ²⁵	CA	2000-2003	EC
GATE 2	CA	1999-2002	EPSRC
Multimedia GATE	PI	1999	MPI ²⁶
AVENTINUS Phase III	CA	1999	EC

(A number of smaller projects have been omitted.)

3 Education

PhD in Computer Science at the University of Sheffield (1995-2000). Thesis entitled *Software Architecture for Language Engineering*.

MSc in Computation at UMIST, Manchester (1990-1991). Dissertation: *Automatic Speech Recognition* using Hidden Markov Modelling with an experimental system in C.

BA (Hons) III Sociology and English-American Studies, University of Sussex (1985-1988). Final year project: *Search and Planning in AI* with an example system in POP11.

‘A’ levels (two) at Charles Keene Collge, Leicester (1984-1985).

‘O’ levels (seven, including Maths, English, French) at Beauchamp College, Leicester (1982).

Miscellaneous Intermediate Aquaponics, Humble by Nature / Aquaponics UK (May 2015). Comprehensive Aquaponics, BioAquaFarm (July 2015). CNC Routing, FabLab

¹⁷Semantic Knowledge Technology.

¹⁸Member of the steering board of the PrestoSpace Integrated Project.

¹⁹Audiovisual Preservation.

²⁰Multimedia Knowledge Management.

²¹Founder Member.

²²Sumerian corpus tools.

²³hi-Tech inSight.

²⁴Advanced Knowledge Technologies.

²⁵Multimedia Indexing.

²⁶Max Planck Institute, Nijmegen.

Manchester (November 2015). Institute of Linguists General Certificate in French for International Communication (1994). City & Guilds Certificate of Applications Programming (COBOL), Scope Technology Ltd., Manchester (1989).

4 Professional Activities

Research proposal reviewer for:

- EPSRC (the Engineering and Physical Sciences Research Council, UK),
- the European Commission (FP6 IST, FP7 IST, ERC),
- BBSRC (the Biotechnology and Biological Sciences Research Council, UK),
- ESRC (the Economic and Social Research Council, UK),
- NWO (the Netherlands Organization for Scientific Research).
- NSERC (Natural Sciences and Engineering Research Council of Canada).
- IWT (Belgian Institute for the Promotion of Innovation by Science and Technology).

Outreach:

- *Food from the Cracks*: aquaponics exhibit at the *Ideas Bazaar* 2015.
- Accredited STEM Ambassador (DBS/CRB certified).
- Set up Sheffield Schools Pi Bank (used by 25 schools through end 2014).
- Festival of the Mind 2014: *Open Data, Open Hardware: Resilient Cultures* (co-organiser).
- Sheffield Cutlers' Ambassador Scheme Raspberry Pi programme.

Journals:

- Editorial Board member for the journal of *Language Resources and Evaluation*²⁷.
- Area Chair for language processing and Editorial Board member for the *Journal of Web Semantics* (2005-2009).
- Editor of special issue of the Journal of *Natural Language Engineering* on Software Architecture for Language Engineering (2004)²⁸.
- Reviewer for *IBM Systems Journal*.
- Reviewer for *ACM Transactions on Information Systems* (TOIS).
- Reviewer for the Special Issue of *Linguisticae Investigationes* on Named Entities: Recognition, Classification and Use.

Advisory boards and professional associations:

- Management Committee member for COST Action *EU Aquaponics Hub (FA1305)*.
- Member of the Council of Professors and Heads of Computer Science (CPHC).
- Member of The Aquaponics Lab.

²⁷Previously named *Computing and the Humanities*.

²⁸With Prof. Donia Scott, Open University.

- Member of the Internet of Things Council.
- Founding Scientific Board member of the Information Retrieval Facility for large-scale IR experimentation.
- Advisory group member of the International Internet Preservation Consortium.
- Technical committee of the European Cultural Heritage Online project.

Standardisation activities:

- Founder member of OASIS/Open standardisation committee on Unstructured Information Management.
- Principal investigator for Sheffield on LIRICS project for ISO TC37/SC4 standards team.
- Member of the British Standards Institute committee TS/1 (Language Resources and Terminology).
- Participant in ISO TC37/SC4 workshop on annotation standards, Pont a Mousson, November 2002.

Conference and workshop organisation:

- Co-chair of the Dagstuhl workshop *Challenges in Document Mining*, May 2011.
- General chair of the first Information Retrieval Facility conference (IRFC 2010), Vienna, May 2010.
- Co-organiser of the New Challenges for NLP Architectures workshop at LREC 2010, Malta, May 2010.
- Organising committee of the workshop on Crossing Media for Improved Information Access at LREC, Genoa, May 2006.
- Scientific committee of CASCON 2006, the 16th Annual International Conference of IBM Centers for Advanced Studies, Dublin, October 2006.
- Co-proposer of Summer Workshop on Language Engineering (chair: Louise Guthrie), CLSP at Johns Hopkins University Baltimore, MA, USA. July 14 to August 22, 2003.
- Co-chair of workshop on Software Engineering and Architecture of Language Technology Systems (SEALTS) at HLT-NAACL 2003.
- Co-chair of workshop on Human Language Technology for the Semantic Web and Web Services at International Semantic Web Conference 2003.
- Programme chair of Workshop on Information Extraction for Slavonic and other Eastern and Central European Languages, RANLP 2003.
- Organising committee of the LREC-2000 workshop on Meta-Descriptions and Annotation
- Organising committee of the LREC-2000 workshop on Schemas for Multimodal/Multimedia Language Resources and Data Architectures and Software Support for Large Corpora.
- Organising committee of the COLING-2000 Workshop on Using Toolsets and Architectures To Build NLP Systems, Centre Universitaire, Luxembourg, 5 August 2000.
- Co-chair of the EPSRC Workshop on NLP Architectures and Language Resources, Baslow, December 1998.

- Co-chair of the Distributing and Accessing Language Resources workshop, Granada LREC conference, May 1998.

Scholarships, invited lectures and tutorials:

- ANR Chaire d'Excellence, Internet Memory, Paris, France, 2011-2012.
- Invited speaker, Text Analytics 2009, Boston, US.
- Visiting Professor, Université Joseph Fourier, Grenoble, 2009.
- Invited speaker Discovery Knowledge and Informatics, Amsterdam, April 2007.
- Panellist on Applications of Memories for Life, British Library symposium, December 2006.
- Invited speaker at conference on European Digital Cultural Heritage, Salzburg, June 2006.
- Invited lecturer, EUROLAN 2005, Iasi, Romania.
- Visiting Scientist, DERI, National University of Ireland at Galway, 2004-2006.
- Tutorial on Human Language Technology for the Semantic Web at the European Semantic Web Symposium, Heraklion, Crete, May 2004.
- Invited speaker, ILASH workshop on Human Language Technologies for the Semantic Web: After OWL: Defacto Standards for Semantic Technology, Sheffield, March 2004.
- Visiting Scholar, Johns Hopkins University Center for Language and Speech Processing, Summer 2003.
- Invited lecture at IBM TJ Watson laboratory: Software Architecture for Language Engineering. August 2003.
- Invited tutorial on Named Entity Recognition at RANLP 2003.
- Invited lecturer on Information Extraction for the EuroLan Summer School, Iasi, Romania, 2001.
- Invited lecturer for HLT Center of Excellence in Information Society Technologies in 21 century (EC HLT project BIS-21) at the Linguistic Modelling Lab, Bulgarian Academy of Sciences.
- Invited presentation at British Classification Society workshop on Computer Text Analysis, Feb 2001, Dept. Probability and Statistics, Univ. Sheffield: GATE, A General Architecture for Text Engineering.

Programme committee memberships:

- LREC 2014.
- 24th International Conference on Computational Linguistics (COLING 2012), Mumbai, India, December 2012.
- 16th International World Wide Web Conference (WWW2007), Banff, Canada, May 2007.
- 10th biannual international Congress of the Italian Association for Artificial Intelligence (AI*IA), 2007
- WWW 2006, the World-Wide Web conference, Edinburgh, UK, May 2006.
- EACL 2006, the 11th Meeting of the European Chapter of the Association for Computational Linguistics, April 3-7 2006, Italy.

- Senior Programme Committee of ISWC2006, the Fifth International Semantic Web Conference, Athens, USA, November 5-9, 2006.
- Web Content Mining with Human Language Technologies workshop at the International Semantic Web Conference, November 2006.
- The Semantic Desktop and Social Semantic Collaboration Workshop at the International Semantic Web Conference, 6 November 2006, Athens, GA, USA.
- OntoLex 2006, workshop at LREC 2006, Genoa, Italy.
- European Semantic Web Conference (ESWC), Budva, Montenegro, June 2006.
- Workshop on Multi-dimensional Markup in NLP at EACL 2006.
- Natural Language Processing for Metadata Extraction (NLP4ME 2006), AIMS, Varna, Bulgaria, September 13-15, 2006.
- Workshop on Web Content Mining with Human Language Technologies, ISWC, Athens, GA, U.S.A. November 5-9 2006.
- IJCAI Edinburgh, UK, July/August 2005.
- Workshop on Multimedia and the Semantic Web, 2nd European Semantic Web Conference, Crete, May / June 2005.
- RANLP 2005 (Recent Advances in Natural Language Processing), Borovetz, Bulgaria, 2005.
- Workshop on Text Mining Research, Practice and Opportunities, RANLP 2005.
- Workshop on End-User Semantic Web Interaction, ISWC 2005, Galway, Ireland.
- IJCAI workshop on Natural Language Generation and the Semantic Web: Perspective and Challenges, Edinburgh, UK, July/August 2005.
- EUROLAN 2005, Multilingual Aligned Resources and their use in the context of Knowledge Web, July/August 2005, Cluj-Napoca, Romania.
- Second European Semantic Web Conference (ESWC), Heraklion, Crete, Greece, May 29 to 1 June, 2005.
- First International Workshop on Representation and Analysis of Web Space (RAWS-05), Prague-Tocna, September 15-16, 2005.
- Senior Programme Committee of ISWC2004, the Third International Semantic Web Conference, Hiroshima, Japan, November 7-11, 2004.
- ACL 2004: 42nd Annual Meeting of the Association for Computational Linguistics, Barcelona, Spain, July 21-26, 2004.
- Workshop on the Semantic Web at SIGIR 2004, Sheffield, UK, July 2004.
- IJCNLP-04 (International Joint Conference on Natural Language Processing), Hainan Island, China, March 22-24, 2004.
- ESWS (First European Semantic Web Symposium), Heraklion, Greece, May 10-12, 2004.
- Additional reviewer for COLING 2004.
- BIS 2004: 7th International Conference on Business Information Systems, Poznan, Poland, April 21-23 2004.

- ECAI 2004 workshop on Application of Semantic Web Technologies to Web Communities, Valencia, Spain, August 23rd, 2004.
- ECAI 2004 workshop on Ontology Learning and Population from Text, Valencia, Spain, August, 2004.
- RDF/RDFS and OWL in Language Technology: 4th Workshop on NLP and XML, ACL-2004, Barcelona, 2004.
- Workshop on NLP for Multimedia Applications, 16th ESSLI, 16-20 August, Nancy 2004.
- Workshop on the Semantic Web at SIGIR 2003, Toronto, Canada, July 2003.
- RANLP 2003 (Recent Advances in Natural Language Processing), Borovetz, Bulgaria, 2003.
- EACL 2003 workshop on Evaluation Initiatives in Natural Language Processing.
- EACL 2003 workshop on Language Technology and the Semantic Web (the 3rd Workshop on NLP and XML).
- Second Workshop on NLP and XML (NLPXML-2002).
- RANLP 2001 (Recent Advances in Natural Language Processing), Tzigov Chark, Bulgaria, 2003.

5 Teaching

I am or have been supervisor, co-supervisor or panellist on a number of PhD theses, on subjects including:

- Distributed and Decentralised Cloud Mechanisms for Resilient Telecommunications.
- Information Extraction Across Sentences.
- Exploiting Unlabelled Data for Named-Entity Labelling.
- Authoring Access Control Policies with Controlled Natural Language.
- Lexical Measurements for Information Retrieval – a Quantum Approach.
- Finite State Transduction Languages for Information Extraction.
- Portable Information Extraction.
- Indexing and Navigating Knowledge.
- Bootstrapping Hindi Tagging.
- Text Extraction from Redundant and Multiple Sources.
- Round-Trip Ontology Engineering with Controlled Languages.
- Adaptive Models of Chinese Text.
- Ontology Authoring and Semantic Annotation using Controlled Natural Languages.
- Intuitive Ontology Authoring using Controlled Natural Language.

I have taught undergraduate and postgraduate courses at Sheffield, UMIST and Salford, on various subjects including:

- formal language theory;
- advanced software engineering;
- programming;
- operating systems.

6 Publications

6.1 Selected Significant and Widely Cited Publications

[Tablan *et al.* 14]

V. Tablan, K. Bontcheva, I. Roberts, and H. Cunningham. Mimir: an open-source semantic search framework for interactive information seeking and discovery. *Journal of Web Semantics*, 2014.

[Cunningham *et al.* 13]

H. Cunningham, V. Tablan, A. Roberts, and K. Bontcheva. Getting more out of biomedical documents with gate’s full lifecycle open source text analytics. *PLoS Computational Biology*, 9(2):e1002854, 02 2013.

[Damljanovic *et al.* 13]

D. Damljanovic, M. Agatonovic, H. Cunningham, and K. Bontcheva. Improving habitability of natural language interfaces for querying ontologies with feedback and clarification dialogues. *Web Semantics: Science, Services and Agents on the World Wide Web*, 0(0), 2013. <http://bit.ly/JWSsd>.

[Johansson *et al.* 12]

M. Johansson, A. Roberts, D. Chen, Y. Li, M. Delahaye-Sourdeix, N. Aswani, M. A. Greenwood, S. Benhamou, P. Lagiou, I. Holctov, L. Richiardi, K. Kjaerheim, A. Agudo, X. Castellsagu, T. V. M. andLuigi Barzan, C. Canova, N. S. Thakker, D. I. Conway, A. Znaor, C. M. Healy, W. Ahrens, D. Zaridze, N. Szeszenia-Dabrowska, J. Lissowska, E. Fabianova, I. N. Mates, V. Bencko, L. Foretova, V. J. andMaria Paula Curado, S. Koifman, A. Menezes, V. Wnsch-Filho, J. E. Neto, P. Boffetta, S. Franceschi, R. Herrero, L. F. Garrote, R. Talamini, S. Boccia, P. Galan, L. Vatten, P. Thomson, D. Zelenika, M. Lathrop, G. Byrnes, H. Cunningham, P. Brennan, J. Wakefield, and J. D. Mckay. Using prior information from the medical literature in gwas of oral cancer identifies novel susceptibility variant on chromosome 4 – the adapt method. *PLoS ONE*, 7(5):e36888, 05 2012.

[Tablan *et al.* 12]

V. Tablan, I. Roberts, H. Cunningham, and K. Bontcheva. GATECloud.net: a Platform for Large-Scale, Open-Source Text Processing on the Cloud. *Philosophical Transactions of the Royal Society A: Physical, Mathematical and Engineering Sciences*, 370, 2012.

[Bontcheva & Cunningham 11]

K. Bontcheva and H. Cunningham. Semantic annotations and retrieval: Man-

- ual, semiautomatic, and automatic generation. In J. Domingue, D. Fensel, and J. Hendler, editors, *Handbook of Semantic Web Technologies*, pages 77–116. Springer Berlin Heidelberg, 2011.
- [Cunningham *et al.* 11b]
H. Cunningham, N. Fuhr, and B. Stein, editors. *Challenges in Document Mining – Report from Dagstuhl Seminar 11171*, Dagstuhl Reports, Dagstuhl, Germany, May 2011. Leibniz-Zentrum für Informatik.
- [Cunningham *et al.* 11a]
H. Cunningham, D. Maynard, K. Bontcheva, V. Tablan, N. Aswani, I. Roberts, G. Gorrell, A. Funk, A. Roberts, D. Damjanovic, T. Heitz, M. Greenwood, H. Saggion, J. Petrak, Y. Li, and W. Peters. *Text Processing with GATE (Version 6)*. <http://gate.ac.uk/books.html>, 2011.
- [Cunningham *et al.* 10c]
H. Cunningham, A. Hanbury, and S. Rüger. Scaling up high-value retrieval to medium-volume data. In H. Cunningham, A. Hanbury, and S. Rüger, editors, *Advances in Multidisciplinary Retrieval (the 1st Information Retrieval Facility Conference)*. LNCS volume number: 6107, Lecture Notes in Computer Science, Vienna, Austria, May 2010. Springer.
- [Cunningham 02]
H. Cunningham. GATE, a General Architecture for Text Engineering. *Computers and the Humanities*, 36:223–254, 2002.
- [Cunningham *et al.* 02b]
H. Cunningham, D. Maynard, K. Bontcheva, and V. Tablan. GATE: A Framework and Graphical Development Environment for Robust NLP Tools and Applications. In *Proceedings of the 40th Anniversary Meeting of the Association for Computational Linguistics (ACL’02)*, 2002.
- [Cunningham 05a]
H. Cunningham. Computational Language Systems, Architectures. *Encyclopedia of Language and Linguistics, 2nd Edition*, 2005.
- [Cunningham 05b]
H. Cunningham. Information Extraction, Automatic. *Encyclopedia of Language and Linguistics, 2nd Edition*, 2005.
- [Cunningham 99a]
H. Cunningham. A Definition and Short History of Language Engineering. *Journal of Natural Language Engineering*, 5(1):1–16, 1999.
- [Cunningham & Bontcheva 05b]
H. Cunningham and K. Bontcheva. Knowledge Management and Human Language: Crossing the Chasm. *Journal of Knowledge Management*, 2005.
- [Cunningham & Scott 04]
H. Cunningham and D. Scott. Introduction to the Special Issue on Software Architecture for Language Engineering. *Journal of Natural Language Engineering*, 2004.
- [Cunningham *et al.* 97b]
H. Cunningham, K. Humphreys, R. Gaizauskas, and Y. Wilks. Software Infrastructure for Natural Language Processing. In *Proceedings of the 5th Conference on Ap-*

- plied Natural Language Processing (ANLP-97)*, March 1997. <http://xxx.lanl.gov/abs/cs.CL/9702005>.
- [Cunningham *et al.* 94a]
H. Cunningham, M. Freeman, and W. Black. Software Reuse, Object-Oriented Frameworks and Natural Language Processing. In *New Methods in Language Processing (NeMLaP-1)*, September 1994, Manchester, 1994. (Re-published in book form 1997 by UCL Press).
- [Li *et al.* 09]
Y. Li, K. Bontcheva, and H. Cunningham. Adapting SVM for Data Sparseness and Imbalance: A Case Study on Information Extraction. *Natural Language Engineering*, 15(02):241–271, 2009.
- [Davis *et al.* 10]
B. Davis, P. Dantuluri, S. Handschuh, and H. Cunningham. Towards controlled natural language for semantic annotation. *International Journal on Semantic Web and Information Systems (IJSWIS)*, 6(4):64–91, 2010.
- [Bontcheva *et al.* 04]
K. Bontcheva, V. Tablan, D. Maynard, and H. Cunningham. Evolving GATE to Meet New Challenges in Language Engineering. *Journal of Natural Language Engineering*, 2004.
- [Saggion *et al.* 03b]
H. Saggion, H. Cunningham, K. Bontcheva, D. Maynard, O. Hamza, and Y. Wilks. Multimedia Indexing through Multisource and Multilingual Information Extraction; the MUMIS project. *Data and Knowledge Engineering*, 2003.
- [Li *et al.* 05b]
Y. Li, K. Bontcheva, and H. Cunningham. Using Uneven Margins SVM and Perceptron for Information Extraction. In *Proceedings of Ninth Conference on Computational Natural Language Learning (CoNLL-2005)*, 2005.
- [Dowman *et al.* 05b]
M. Dowman, V. Tablan, H. Cunningham, and B. Popov. Web-assisted annotation, semantic indexing and search of television and radio news. In *Proceedings of the 14th International World Wide Web Conference*, Chiba, Japan, 2005.
- [Li *et al.* 07a]
Y. Li, K. Bontcheva, and H. Cunningham. Hierarchical, Perceptron-like Learning for Ontology Based Information Extraction. In *16th International World Wide Web Conference (WWW2007)*, pages 777–786, May 2007.
- [Johansson *et al.* 09a]
M. Johansson, Y. Li, J. Wakefield, M. Greenwood, T. Heitz, I. Roberts, H. Cunningham, P. Brennan, A. Roberts, and J. Mckay. Using prior information attained from the literature to improve ranking in genome-wide association studies. In *The American Society of Human Genetics 59th Annual Meeting*, Honolulu, Hawaii, USA, October 2009.
- [Guthrie *et al.* 04]
L. Guthrie, R. Basili, F. Zanzotto, K. Bontcheva, H. Cunningham, D. Guthrie, J. Cui, M. Cammisa, J. Liu, C. Martin, K. Haralambiev, M. Holub, K. Machery,

and F. Jelinek. Large Scale Experiments for Semantic Labelling of Noun Phrases in Raw Text. In *Proceedings of the Language Resources and Evaluation Conference (LREC 2004)*, 2004.

[Maynard *et al.* 03b]

D. Maynard, V. Tablan, K. Bontcheva, and H. Cunningham. Rapid customisation of an Information Extraction system for surprise languages. *Special issue of ACM Transactions on Asian Language Information Processing: Rapid Development of Language Capabilities: The Surprise Languages*, 2003.

[Maynard *et al.* 02d]

D. Maynard, V. Tablan, H. Cunningham, C. Ursu, H. Saggion, K. Bontcheva, and Y. Wilks. Architectural Elements of Language Engineering Robustness. *Journal of Natural Language Engineering – Special Issue on Robust Methods in Analysis of Natural Language Data*, 8(2/3):257–274, 2002.

[McEnery *et al.* 00]

A. McEnery, P. Baker, R. Gaizauskas, and H. Cunningham. EMILLE: Building a Corpus of South Asian Languages. *Vivek, A Quarterly in Artificial Intelligence*, 13(3):23–32, 2000.

[Rodgers *et al.* 97]

P. Rodgers, R. Gaizauskas, K. Humphreys, and H. Cunningham. Visual Execution and Data Visualisation in Natural Language Processing. In *IEEE Visual Language*, 1997.

6.2 Journal Papers: Refereed

[Tablan *et al.* 14]

V. Tablan, K. Bontcheva, I. Roberts, and H. Cunningham. Mimir: an open-source semantic search framework for interactive information seeking and discovery. *Journal of Web Semantics*, 2014.

[Cunningham *et al.* 13]

H. Cunningham, V. Tablan, A. Roberts, and K. Bontcheva. Getting more out of biomedical documents with gate’s full lifecycle open source text analytics. *PLoS Computational Biology*, 9(2):e1002854, 02 2013.

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[Cunningham *et al.* 05]

H. Cunningham, K. Bontcheva, and Y. Li. Knowledge Management and Human Language: Crossing the Chasm. *Journal of Knowledge Management*, 9(5):108–131, 2005.

[Cunningham *et al.* 11b]

H. Cunningham, N. Fuhr, and B. Stein, editors. *Challenges in Document Mining – Report from Dagstuhl Seminar 11171*, Dagstuhl Reports, Dagstuhl, Germany, May 2011. Leibniz-Zentrum für Informatik.

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M. Johansson, A. Roberts, D. Chen, Y. Li, M. Delahaye-Sourdeix, N. Aswani, M. A. Greenwood, S. Benhamou, P. Lagiou, I. Holctov, L. Richiardi, K. Kjaerheim, A. Agudo, X. Castellsagu, T. V. M. andLuigi Barzan, C. Canova, N. S. Thakker, D. I. Conway, A. Znaor, C. M. Healy, W. Ahrens, D. Zaridze, N. Szeszenia-Dabrowska, J. Lissowska, E. Fabianova, I. N. Mates, V. Bencko, L. Foretova, V. J. andMaria Paula Curado, S. Koifman, A. Menezes, V. Wnsch-Filho, J. E. Neto, P. Boffetta, S. Franceschi, R. Herrero, L. F. Garrote, R. Talamini, S. Boccia, P. Galan, L. Vatten, P. Thomson, D. Zelenika, M. Lathrop, G. Byrnes, H. Cunningham, P. Brennan, J. Wakefield, and J. D. Mckay. Using prior information from the medical literature in gwas of oral cancer identifies novel susceptibility variant on chromosome 4 – the adapt method. *PLoS ONE*, 7(5):e36888, 05 2012.

[Tablan *et al.* 12]

V. Tablan, I. Roberts, H. Cunningham, and K. Bontcheva. GATECloud.net: a Platform for Large-Scale, Open-Source Text Processing on the Cloud. *Philosophical Transactions of the Royal Society A: Physical, Mathematical and Engineering Sciences*, 370, 2012.

[Azzam *et al.* 99]

S. Azzam, K. Humphreys, R. Gaizauskas, H. Cunningham, and Y. Wilks. Using a Language Independent Domain Model for Multilingual Information Extraction. *Applied Artificial Intelligence*, 13(7), 1999. Special Issue on Multilinguality in the Software Industry: the AI Contribution (MULSAIC-97).

[Bontcheva *et al.* 04]

K. Bontcheva, V. Tablan, D. Maynard, and H. Cunningham. Evolving GATE to Meet New Challenges in Language Engineering. *Journal of Natural Language Engineering*, 2004.

[Davis *et al.* 10]

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