# **Curriculum Vitae - Paul Buitelaar**

# July 2018

# **Summary**

### Personal Details

Full Name: Peter Paul Buitelaar
Date of Birth: September 23<sup>rd</sup>, 1963
Place of Birth: Rotterdam, the Netherlands

Nationality: Dutch

Languages: Dutch (native), English (fluent), German (fluent), Italian (beginner)

Education: PhD Computer Science; MA Computational Linguistics

### **Current Position**

Senior Lecturer of Engineering and Informatics, Vice-Director of the Data Science Institute and Co-PI of the Insight Centre for Data Analytics at NUI Galway. I lead the DSI/Insight Unit for Natural Language Processing (<a href="http://nuig.insight-centre.org/unlp/">http://nuig.insight-centre.org/unlp/</a>).

### Research Interests

Natural language processing (NLP) and semantics, specifically with applications in semantic-based approaches to text mining, data analytics and information access and search by use of Semantic Web and Linked Data technologies. Specific research interests are in: information extraction, ontology learning, taxonomy extraction, term extraction, term translation, semantic similarity, entity linking, relation extraction, linked data. I have supervised and examined many postgraduate theses in these and other research topics, either as thesis supervisor or as external examiner (full details below).

## Publications and Scientific Impact

194 Publications, 5238 Citations, h-index: 33 (Source: Google Scholar, July 2018) <a href="http://scholar.google.com/citations?user=aDJBCh4AAAAJ&amp;hl=en">http://scholar.google.com/citations?user=aDJBCh4AAAAJ&amp;hl=en</a>				
4 Books	3 Proceedings	21 Journal Articles	3 Chapters and 13 Articles in Books	77 Refereed Conference and 73 Workshop Papers

My research and resulting publications initiated and/or contributed significantly to the scientific and technical development of NLP in Semantic Web, Linked Data and Data Analytics research. I am ranked within the top 5% of researchers in NLP, i.e., rank 212 out of all research profiles on Google Scholar that mention Natural Language Processing as expertise topic (4589).

## Industry Impact, Patents and Standardization

Industry application of my work has been in a wide variety of areas, including financial services, business intelligence, news and media, tourism, e-Commerce, eHealth and health care. I have initiated a number of industry research projects, either funded completely by individual companies or cofunded by Enterprise Ireland or Science Foundation Ireland. Additionally, I led research initiatives that

had significant interaction with individual companies in the context of EU funded projects. We developed 8 Invention Disclosure Forms in the context of these projects and provided 3 licenses for our knowledge extraction system Saffron as well as 1 license for our approach to semantic similarity analysis for entity linking.

I hold the following patent (with Siemens AG, Germany): A method and an apparatus for processing semantic data resources - European patent registration, File number: 08010815.2, 2008

My research has also contributed significantly to standardization efforts, in particular on the representation and exploitation of linguistic information in ontologies and Linked Data, i.e. as co-chair of the W3C Ontology-Lexica Community Group: <a href="http://www.w3.org/community/ontolex/">http://www.w3.org/community/ontolex/</a>.

## Research Funding and Project Acquisition

I put a strong emphasis on the acquisition of research funding to sustain the research efforts of my team. A specific emphasis is on EU funding, besides national and industry funding. Since joining NUI Galway in 2009 I have acquired funding for a total of more than M $\in$ 4 as follows: EU funded projects ( $\sim$ M $\in$ 1.7), national funded projects ( $\sim$ M $\in$ 1.6), industry led funding ( $\sim$ M $\in$ 1).

# **Education, Appointments, Projects**

## **University Education**

- 1998 **PhD in Computer Science**, Brandeis University, Waltham, USA
- 1990 **MA (equivalent) in Computational Linguistics**, Universiteit Utrecht, the Netherlands

## **Professional Appointments**

Since 2015: **Senior Lecturer of Informatics** and **Vice-Director** of the Insight Centre for Data Analytics at the Data Science Institute, NUI Galway. In this position I am responsible for day-to-day leadership and strategic planning of the institute, serving on university committees such as the Digital Culture Initiatives Steering Group, PhD supervision, teaching in the MSc on Data Analytics, and acquisition and management of EU, national and industry projects.

Since 2013: **Professor Extraordinarius**, School of Interdisciplinary Research and Graduate Studies of the University of South-Africa (UNISA). PhD supervision at UNISA.

2009 - 2015: **Senior Research Fellow**, Digital Enterprise Research Institute (DERI), later incorporated in the Insight Centre for Data Analytics at NUIG. Research manager in many international (EU) and national (SFI, EI) projects and founder/leader of Unit for NLP.

1998 - 2008: **Senior Researcher**, Language Technology Lab of the German Research Center for Artificial Intelligence (DFKI), Saarbrucken, Germany. Researcher and research manager in many international (EU) and national projects as well as co-head of the Competence Centre Semantic Web.

1992 - 1998: PhD candidate, Department of Computer Science, Brandeis University, Waltham, USA.

1990 - 1992: **Researcher**, Department of Computer Science, VU, Amsterdam, the Netherlands.

## Involvement in Funded Research Projects

From 2018: Co-PI on SFI funded *FinTech Spoke* (industry projects with IBM, Fidelity)

2018: PI on industry project with Genesys, Galway, Ireland (planned start autumn 2018)

2018: PI on industry project with Fidelity, Galway, Ireland (planned start summer 2018)

2018: PI on industry project with Munich Re (MRAS), Dublin, Ireland

- 2017 2018: Mentor SFI Industry Fellowship Dr. Ian Wood at Aylien, Dublin, Ireland
- Since 2015: Co-PI (FI since 2013) on SFI funded *Insight Centre for Data Analytics*, leading Linked Data Research Stream (LD and Text Mining, LD Infrastructure, LD in eHealth)
- 2015 2017: PI and consortium coordinator of EU H2020 project (Innovation Action) *MixedEmotions: Social Semantic Emotion Analysis for Innovative Multilingual Big Data Analytics Markets*, leading interdisciplinary consortium of 4 academic and 4 commercial organizations
- 2014 2015: PI on EI funded Innovation Partnership with *Irish Times*
- 2014: PI on industry project with HP, Galway, Ireland
- 2014: PI on industry project with Adoreboard, Belfast, NI
- 2014: PI on Irish Research Council (IRC) 'New Foundations' project for setting up a network on *Natural Language Processing for Digital Humanities in Ireland*
- 2014-2017: MC member of EU COST action <u>iV&L Net: Combining Computer Vision and Language Processing For Advanced Search, Retrieval, Annotation and Description of Visual Data</u>
- 2014 2018: Co-PI and WP lead in Enterprise Ireland funded <u>Governance, Risk and Compliance</u> <u>Technology Centre (GRCTC)</u>
- 2014: PI on SFI funded project CARS: Content Analysis for Recommender Systems (Multi-source Personalization for E-commerce Using Customer Reviews and Linked Open Data)
- 2013 2015: PI on EU FP7 Coordination and Support Action LIDER: Linked Data as an enabler of cross-media and multilingual content analytics for enterprises across Europe
- 2013 2016: MC member of EU COST action PARSEME: PARSing and Multi-word Expressions
- 2012 2014: PI and WP lead on EU FP7 project EUROSENTIMENT: Language Resource Pool for Sentiment Analysis in European Languages
- 2012 2013: PI and WP lead on EU FP7 Network of Excellence *PROMISE: Participative Research labOratory for Multimedia and Multilingual Information Systems*
- 2011: PI on Enterprise Ireland funded feasibility study for the commercialization of <u>Saffron</u> (Knowledge Extraction from Text)
- 2010 2014: MC member and WG lead on EU COST action MUMIA: Multilingual and Multifaceted Interactive Information Access
- 2010 2013: Co-PI and WP lead on EU Marie Curie funded Net2: A Network for Networked Knowledge
- 2010 2013: PI and consortium coordinator on EU FP7 project *Monnet: Multilingual Ontologies for Networked Knowledge*, leading an international and interdisciplinary consortium of 4 academic and 3 commercial organizations
- 2009 2013: Co-PI and WP lead on Science Foundation Ireland (SFI) funded project Lion-2
- 2007 2008: Senior researcher on German national project *Theseus-MEDICO: Towards Scalable Semantic Image Search in Medicine*, leading research across several academic and commercial consortium partners
- 2006 2008: Senior researcher on EU project K-Space: Knowledge-based Multimedia Analysis, leading research across several academic consortium partners
- 2004 2007: Senior researcher on German national project *SmartWeb: Mobile Access to the Semantic Web*, leading research across 3 academic and commercial consortium partners
- 2004 2005: Co-PI and project manager on German national funded project *VieWs: Connecting Information and Knowledge in saarland.de*
- 2004: Senior researcher on EU project DIRECT-INFO: Media Monitoring and Multimodal Analysis

2003 - 2004: Senior researcher on EU project MEMPHIS: Multilingual Content for Flexible Format Internet Services

2002 - 2004: Coordinator of SIG on Language Technology in Ontology Development and Use of EU project OntoWeb

2000 - 2003: Coordinator of EU/NSF project <u>MuchMore: Multilingual Concept Hierarchies for Medical Information Organization and Retrieval</u>, leading a consortium of 4 European partners (academic and commercial) and 2 US universities (Stanford, CMU)

1998 - 2000: Senior researcher on EU project MIETTA: Multilingual Information Extraction for Tourism and Travel Assistance

1998 - 2000: Senior researcher on EU project OLIVE: Speech Based Video Retrieval

1995 - 1997: Researcher in NSF funded project Core Lexical Engine

1991 - 1992: Researcher in project LIKE: Linguistic Instruments in Knowledge Engineering

# **Evidence of External Reputation**

## **Keynotes**

*Topics in Opinion Mining* - 5<sup>th</sup> International Semantic Web Information Systems symposium, 2018, Rotterdam, the Netherlands

Knowledge Extraction with Saffron: A Framework and Research Program - 11<sup>th</sup> Terminology and Artificial Intelligence conference, 2015, Granada, Spain

On Man-Machine Interoperability: Integration of Ontologies and Lexicons - 2<sup>nd</sup> International Conference on Global Interoperability for Language Resources, 2010, Hong Kong

Ontology Learning: Where are we? And where are we going? - ESOE: International Workshop on Emergent Semantics and Ontology Evolution, co-located with ISWC, 2007, Busan, South-Korea

Ontologies in Semantic Annotation: Selection, Population, Lexicalisation - SAAKM: Semantic Authoring, Annotation and Knowledge Markup Workshop, co-located with K-Cap, 2007, Whistler, BC, Canada

Text Mining Support in Semantic Metadata Extraction - Workshop on Knowledge Management and Semantic Web for Engineering Design, co-located with K-Cap, 2007, Whistler, BC, Canada

On the Role of Natural Language Processing in a Data-Driven Approach to the Ontology Life-Cycle - Conference of the French association on Natural Language Processing, 2007, Toulouse, France

*Harnessing the Semantic Web for Natural Language Processing* - 7<sup>th</sup> International Workshop on Computational Semantics, 2007, Tilburg, the Netherlands

*Ontology Learning and Population in SmartWeb* - 3<sup>rd</sup> Philips Symposium on Intelligent Algorithms, 2006, Eindhoven, the Netherlands

Ontology Learning for Semantic Metadata Extraction - Natural Language Processing for Metadata Extraction, co-located with AIMSA, 2006, Varna, Bulgaria

Semantic Annotation in MuchMore - Computational Linguistics in Flanders, 2003, Brussels, Belgium

Lexical Semantics in the Age of the Semantic Web - Conference of the Slovenian Society for Language Technologies, 2002, Ljubljana, Slovenia

### Invited Talks

CoreLex: Recap and Related Work – Computational Linguistics Department, Heinrich Heine University Düsseldorf, Germany, 2018

Knowledge Extraction with Saffron – Texts Master Class Seminar, University College Cork, Ireland (with John McCrae), 2017

Ontology Learning Overview – Ontology Summit 2017: AI, Learning, Reasoning, and Ontologies, Ontolog Community (Webinar), 2017

Applications of Knowledge Extraction from Text with Saffron – DFKI GmbH (German Research Institute for Artificial Intelligence), Saarbrücken, Germany, 2015

Text Mining with and for Linked Data – Workshop on Linked Data Applications for Research, School of Library and Information Science, Humboldt University Berlin, Germany, 2014

Computational Linguistics through the Years; with an introduction to 'Saffron' – Computational Linguistics Alumni at Koblenz University, Germany, 2014

Language to Knowledge: Towards an Integrated Framework – Xerox Research Centre Europe (XRCE), Grenoble, France, 2011

Ontology Lexicalisation – Institute for Applied Linguistics (IULA), Universitat Pompeu Fabra, Barcelona, Spain, 2011

Ontology Lexicalisation – Copenhagen Symposium on Approaches to the Lexicon, Denmark, 2010

Finding, Linking and Organizing Resources with Linked Data & Natural Language Processing - Fondazione Bruno Kessler, Trento, Italy, 2010

CoreLex: Systematic Polysemy, Underspecification and Coercion - Dipartimento Ingegneria e Scienza dell'Informazione, University of Trento, Italy, 2010

Finding, Linking and Organizing Resources with Linked Data & Natural Language Processing - CATCH project meeting, Rotterdam, the Netherlands, 2010

Ontologies and the Lexicon: Connecting World and Word Knowledge - School of Computer Science of the University of Manchester, Manchester, UK, 2010

Expertise Mining from Scientific Literature - Semantic Computing Group, Bielefeld University, Bielefeld, Germany, 2009

Ontologies and the Lexicon: Connecting World and Word Knowledge - Graduate Program Empirical Language Processing (Empirische Sprachverarbeitung), LMU, Munich, Germany, 2009

Project Acquisition at DERI: The Monnet FP7 Project Proposal - UK Info Day for ICT Call 6, Enterprise Europe Scotland & Enterprise Ireland, Edinburgh, UK, 2009

Ontologies and the Lexicon: Connecting World and Word Knowledge - FlareNet project meeting, Pisa, Italy, 2009

Ontologies: Creating Stepping Stones in a Sea of Data - Theseus Symposium ST3, ST5 Joint Session on Applications and Benefits of Ontologies, Berlin, Germany, 2009

Invited expert at the Semantic Data Integration Workshop of the LifeWatch project, Amsterdam, the Netherlands, 2009

Ontology-based Information Extraction with SOBA - Department of Linguistics and Philology, Uppsala University, Uppsala, Sweden, 2009

Ontology-based Information Extraction with SOBA - Workshop of the CATCH project at Naturalis, Leiden, the Netherlands, 2008

Towards Query Pattern Mining in the Medical Domain - Center of Content and Knowledge Engineering at the Dept. of Information and Computing Sciences, Utrecht University, the Netherlands, 2008

Ontologies & Text Mining (for Life Sciences) - Seminar on Text Mining and Ontologies for Life Sciences, Dagstuhl, Germany, 2008

Ontology learning from Text - Backgrounds, State-of-the-Art and Challenges - Computational Linguistics Dept., University of Heidelberg, Germany, 2008

Towards Multilingual/Multimedia Ontologies and Cross-Media Analysis - Workshop of the X-Media project, Karlsruhe, Germany, 2007

Language Technology in the Ontology Life-Cycle - Workshop of the LT4eL project, Prague, Czech Republic, 2007

Tutorial on Ontology Learning - SIKS-ICS (Dutch Research School for Information and Knowledge systems) Seminar on the Semantic Web, Utrecht, the Netherlands, 2007

Language Technology in the Ontology Lifecycle - Nancy NLP Seminar, LORIA, Nancy, France, 2006

Language Technology in the Ontology Lifecycle - Computer Science Dept., Brandeis University, Waltham MA, USA, 2006

Ontology Learning: Multilingual and Multimedia Aspects - EKAW Workshop on Ontology Evolution and Multimedia Information Extraction (BOEMIE), Podebrady, Czech Republic, 2006

Ontology-driven Predicate Argument Structure Analysis for Event Annotation (with Anette Frank) - Workshop on Multilingual Semantic Annotation, Saarbruecken, Germany, 2006

Ontology Learning from Text - European Bioinformatics Institute, Hinxton, UK, 2006

Language Technology in the Ontology Lifecycle - KMI, Open University, Milton Keynes, UK, 2006

Human Language Technology for the Semantic Web - Seminars in Computing, National University of Ireland, Galway, Ireland, 2005

Language Technology in Knowledge Markup and Ontology Evolution - Seminar on Artificial Intelligence, Luxembourg, 2005

Corpus-based Ontology Extension - Symposium on corpus applications in literary studies, linguistics and information technology, Darmstadt, Germany, 2005

Position Paper on Machine Learning for the Semantic Web - Seminar on Machine Learning for the Semantic Web, Dagstuhl, Germany, 2005

Towards the Integration of Ontologies and Semantic Lexicons -  $2^{nd}$  Workshop of the MEANING project, Trento, Italy, 2005

Language Technology for the Semantic Web - Talks in Computational Linguistics, Stockholm University, Stockholm, Sweden, 2004

Ontologies: Contributions from Language Technology - eJustice Dialogues, Saarbruecken, Germany

Connecting Human Language Technology and Ontology Engineering - CNTS Colloquia, Univ. of Antwerpen, Belgium, 2004

OntoLT: Connecting Human Language Technology and Ontology Engineering - ILASH Half-day Workshop on Human Language Technologies for the Semantic Web, Univ. of Sheffield, UK, 2004

Ontology Extraction from Text with OntoLT - DaimlerChrysler Workshop on Ontology Learning and Question Answering Tools from/for Large Text Collections, Ulm, Germany, 2004

MuchMore: Multilingual Concept Hierarchies for Medical Information Organization and Retrieval - LangTech Conference, Paris, France, 2004

Semantic Corpus Annotation in MuchMore; Language Technology and the Semantic Web - Institut de Linguistica Aplicada (IULA), Universitat Pompeu Fabra, Barcelona, Spain, 2003

Semantic Corpus Annotation in MuchMore; Language Technology and the Semantic Web - Institute for InfoComm Research, Singapore, 2003

Semantic Lexicons: Between Ontology and Terminology - ONTOLEX workshop, Sozopol, Bulgaria, 2000

CoreLex Revisited: Finding Systematic Patterns of Meaning - Department of Linguistics, University of Tuebingen, Germany, 1999

Ambiguity in Semantic Annotation - Computer Science Institute, University of Leipzig, Germany, 1999

Concepts in Multilingual Information Retrieval - Kansai Advanced Research Center, Osaka, Japan, 1999

### Member of International Panels

EU Experts Consultation Workshop: Towards a Single Information Space in Europe for the Environment (SISE), 2008, Brussels, Belgium

Semantic Web, ONTOLEX Workshop, LREC, 2004, Lisbon, Portugal

EU Experts Consultation Meeting on Semantic-based Knowledge Systems, 2004, Luxembourg

EU Expert Round Table on Knowledge Technologies and Digital Content: Requirements and Options for EU research and technology development, 2003, Luxembourg

Semantic Web, NLPXML Workshop, COLING, 2002, Taipei, Taiwan

Semantic Web: A New Challenge for Language Technology?, COLING, 2002, Taipei, Taiwan

Standardizing and Linking WordNets, SENSEVAL2, ACL/EACL, 2001, Toulouse, France

Wissen ueber Woerter (Knowledge about Words), Institut für Deutsche Sprache (Institute for the German Language), 2001, Mannheim, Germany

Cross-Lingual Information Retrieval, ASIS (American Society for Information Science and Technology), 2000, Chicago, USA

Multilingual Lexicons, Final Workshop of the SIMPLE Project, 2000, Greece

## Member of Professional Organizations

2011 - 2018: Co-Chair of the W3C Ontology-Lexica Community Group

2007 - 2013: Information Officer of the Special Interest Group on Computational Semantics of the Association for Computational Linguistics (<u>SIGSEM</u>)

2009 - 2010: Executive Council Member (founding member) of the International Association for Ontology and its Applications (IAOA)

2004 - 2008: DFKI representative in W3C Advisory Committee

## Organization of Scientific Events

### **Conference Organizing Co-Chair**

1st International Conference on Language, Data and Knowledge (LDK), 2017, Galway, Ireland

5<sup>th</sup> International Conference on Formal Ontology in Information Systems (FOIS), 2008, Saarbrucken, Germany

### **Workshop Organizing Co-chair**

Scientometrics at the 14th Extended Semantic Web Conference, May 2017, Portorož, Slovenia

Emotion and Sentiment Analysis (ESA) at the Language Resources and Evaluation Conference (LREC), 2016, Portorož, Slovenia

5<sup>th</sup> International Workshop on Emotion, Social Signals, Sentiment & Linked Open Data (ES³LOD) at the Language Resources and Evaluation Conference (LREC), 2014, Reykjavik, Iceland

<u>3<sup>rd</sup> Workshop on the Multilingual Semantic Web</u> (MSW3) at the 11<sup>th</sup> International Semantic Web Conference, 2012, Boston, MA, USA

<u>Workshop on the Multilingual Semantic Web at Schloss Dagstuhl</u> - Leibniz-Zentrum für Informatik, 2012, Dagstuhl, Germany

<u>Interacting with Linked Data</u> (ILD) at the 9<sup>th</sup> Extended Semantic Web Conference, 2012, Heraklion, Greece

<u>2<sup>nd</sup> Workshop on the Multilingual Semantic Web</u> (MSW2) at the 10<sup>th</sup> International Semantic Web Conference, 2011, Bonn, Germany

1st Workshop on the Multilingual Semantic Web (MSW) at the 19th World Wide Web conference, 2010, Raleigh, NC, USA

<u>3<sup>rd</sup> Workshop on Ontology Learning and Population</u> (OLP3) at ECAI (European Conference on Artificial Intelligence), 2008, Patras, Greece

From Text to Knowledge: The Lexicon/Ontology Interface (OntoLex) at the 6<sup>th</sup> International Semantic Web Conference (ISWC), 2007, Busan, South-Korea

<u>2<sup>nd</sup> Workshop on Ontology Learning and Population</u> (OLP2) at COLING/ACL, 2006, Sydney, Australia

<u>Interfacing Ontologies and Lexical Resources for Semantic Web Technologies</u> (OntoLex) at the Language Resources and Evaluation Conference (LREC), 2006, Genoa, Italy

Ontology Learning and Population at the European Conference on Artificial Intelligence (ECAI), 2004, Valencia, Spain

<u>Semantic Annotation and Intelligent Content</u> at the International Conference on Computational Linguistics (COLING), 2000, Luxembourg

Workshop on <u>Lexical Semantics in Context: Corpus, Inference and Discourse</u> at the European Summer School on Logic, Language and Information (ESSLLI), 1998, Saarbrücken, Germany

#### **Tutorials**

Ontologies and Lexical Semantics in Natural Language Understanding at ESSLLI (European Summer School on Logic Language and Information), 2007, Dublin, Ireland

Ontology Learning from Text at EACL (Conference of the European Association for Computational Linguistics), 2006, Trento, Italy

Ontology Learning from Text at ECML/PKDD (European Conference on Machine Learning), 2005, Porto, Portugal

#### **Panels**

Domains, Topics and Senses, SENSEVAL2 Workshop at ACL/EACL, 2001, France

#### Challenges

SemEval 2016 Task 13: Taxonomy Extraction Evaluation (TExEval-2)

SemEval 2017 Task 17: Taxonomy Extraction Evaluation (TExEval)

#### **Summer School Program Area Co-Chair**

European Summer School on Logic, Language and Information (ESSLLI), Area: Language and Computation, 2004, France.

#### **Conference Program Co-Chair**

IRFC 2014 - 7th Information Retrieval Facility Conference, Denmark

SAMT 2007 - 2<sup>nd</sup> International Conference on Semantics and Digital Media Technology, Italy

### Senior Member / Area Co-Chair of Conference Program Committee

SEMANTICS 2015 - 11<sup>th</sup> International Conference on Semantic Systems (Senior PC Member) Vienna, Austria

\*SEM 2015 – 4<sup>th</sup> Joint Conference on Lexical and Computational Semantics (Area Chair: Lexical resources, linked data, ontologies), Denver, Colorado

AAAI 2015 – 29th AAAI Conference on Artificial Intelligence (Senior PC Member), Austin, TX, USA

IUI 2013 – ACM International Conference on Intelligent User Interfaces (Senior PC Member: Semantic Web track), Santa Monica, CA, USA

ESWC 2012 – 9<sup>th</sup> Extended Semantic Web Conference (Track co-chair: Natural Language Processing and Information Retrieval), Heraklion, Greece

ISWC 2010 – 9th International Semantic Web Conference (Senior PC Member), Shanghai, China

CIKM 2008 – 17<sup>th</sup> ACM Conference on Information and Knowledge Management (Meta-Reviewer for Track: Knowledge Management), Napa Valley CA, USA

COLING  $2008 - 22^{nd}$  International Conference on Computational Linguistics (Area Chair: lexicon, lexical semantics, word sense disambiguation), Manchester, UK

EACL 2006 – 11<sup>th</sup> Conference of the European Chapter of the Association for Computational Linguistics (Area Chair: lexicon, lexical databases, ontologies, language resources), Trento, Italy

#### **Member of Conference Program Committee**

ACL (Annual Meeting of the Association for Computational Linguistics) 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2010, 2009, 2008, 2007, 2003, 2000

ISWC (International Semantic Web Conference) 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2009, 2007, 2006

ESWC (Extended Semantic Web Conference) 2018, 2017, 2015, 2013, 2010, 2009, 2008, 2006, 2005

LREC (International Conference on Language Resources and Evaluation) 2018, 2016, 2014, 2012, 2010, 2006, 2004

EMNLP (Empirical Methods in Natural Language Processing) 2018, 2017, 2016, 2014, 2013, 2011, 2009

WWW (The Web Conference) 2018, 2013, 2012, 2007, 2005, 2004

FOIS (International Conference on Formal Ontology in Information Systems) 2016, 2014, 2012, 2010, 2008, 2001

COLING (International Conference on Computational Linguistics) 2018, 2016, 2014, 2004, 2002, 1998

\*SEM (Joint Conference on Lexical and Computational Semantics) 2018, 2017, 2016, 2014, 2013, 2012

IJCNLP (International Joint Conference on Natural Language Processing) 2017, 2011, 2008, 2005, 2004

EACL (Conference of the European Chapter of the Association for Computational Linguistics) 2017, 2014, 2012, 2009, 2003

AAAI (Conference on Artificial Intelligence) 2018, 2017, 2012, 2011

SEMANTICS/I-KNOW (International Conference on Semantic Systems) 2017, 2016, 2007, 2006

IWCS (International Conference on Computational Semantics) 2017, 2015, 2013

NLDB (International Conference on Natural Language & Information Systems) 2018, 2017, 2012

ECIR (European Conference on Information Retrieval) 2018, 2016, 2015

TKE (Conference on Terminology and Knowledge Engineering) 2016, 2014, 2012

International Conference of the Global WordNet Association 2006, 2004, 2002

NAACL-HLT (North American Chapter of the Association for Computational Linguistics & Human Language Technologies) 2018, 2016, 2015

ECAI (European Conference on Artificial Intelligence) 2018, 2014, 2010

ECML/PKDD (European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases) 2009, 2007

EKAW (International Conference on Knowledge Engineering and Knowledge Management) 2012, 2010

K-CAP (International Conference on Knowledge Capture) 2011, 2009

TIA (Terminology and Artificial Intelligence conference), 2015, 2013

IRFC (Information Retrieval Facility Conference) 2013, 2012

CLIC (Conferenza Italiana di Linguistica Computazionale) 2015, 2014

ISMB (Intelligent Systems for Molecular Biology) 2005, 2004

IJCAI (International Joint Conference on Artificial Intelligence) 2001

ACM Symposium on Applied Computing 2007

ECIR (European Conference on Information Retrieval) 2017

LDK (International Conference on Language, Data and Knowledge) 2017

SLSP (International Conference on Statistical Language and Speech Processing) 2017

MMM (International MultiMedia Modeling Conference) 2009

ECCB (European Conference on Computational Biology) 2005

ICSC (IEEE International Conference on Semantic Computing) 2008

FLAIRS (International Florida Artificial Intelligence Research Society Conference) 2007

ASWC (Asian Semantic Web Conference) 2009

GSCL (German Society for Computational Linguistics and Language Technology) 2013

### **Member of Workshop Program Committee**

PC member for over 100 workshops collocated with international conferences (ACL, EMNLP, EACL, COLING, LREC, ISWC, ESWC, IWCS, AAAI, ECAI, CIKM, WWW, SIGIR, ECML, ICML, EKAW, K-CAP)

## Journals Reviewing

2004 –2016: Editorial Board Member of *Language Resources and Evaluation*, Springer (eds. Nicoletta Calzolari, Nancy Ide)

2004 –2011: Editorial Board Member of *FOLLI Publications on Logic, Language and Information*, Sub-series of Lecture Notes in AI, Springer (eds. Luigia Aiello, Michael Moortgat, Maarten de Rijke)

Reviewer for special issue on *Under-resourced Languages, Collaborative Approaches and Linked Open Data: Resources, Methods and Applications.* Language Resources and Evaluation, Springer

Reviewer for special issue on *Artificial Intelligence*, *Wikipedia and Semi-Structured Resources*. Artificial Intelligence, Vol.194, Elsevier, 2013

Reviewer for special issue on *Ontologies and Terminologies: Continuity or Rupture*. Applied Ontology, Vol. 7:4, IOS press, 2012

Reviewer for special issue on *Free Language Resources*. Traitement Automatique des Langues, Vol. 52:3. Lavoisier, 2011

Reviewer for special issue on *Semantic Analysis for Interactive Multimedia Services*. Signal Processing: Image Communication, Vol. 23:7, Elsevier, 2008

Reviewer for special issue on *Summarization and Information Extraction from Medical Documents*. Artificial Intelligence in Medicine, Vol. 33:2, Elsevier, 2005

Reviewer for special issue on *Semantic Lexicons*, Traitement Automatique des Langues. Vol. 42:3, Lavoisier, 2002

Reviewer ACM Computing Surveys; ACM Journal on Computing and Cultural Heritage; Applied Ontology, IOS Press; Artificial Intelligence, Elsevier; Bioinformatics, Oxford University Press; Communications of the ACM; Computational Linguistics, MIT Press; Data & Knowledge Engineering, Elsevier; Intelligent Systems, IEEE Computer Society; International Journal of Human-Computer Studies, Elsevier; International Journal of Semantic Web and Information Systems, IGI Global; Journal of Natural Language Engineering, Cambridge University Press; Journal of Web Semantics, Elsevier; Knowledge Engineering Review, Cambridge University Press; Language Resources and Evaluation Journal, Springer

## Reviewer for Funding Agencies

EU - FP7, COST

IWT Strategic Basic Research (SBO), Flanders/Belgium

Norwegian Research Council

Nederlandse Organisatie voor Wetenschappelijk Onderzoek - Dutch Research Council (NWO)

Science Foundation Ireland (SFI)

Oesterreichische Forschungsfoerderungsgesellschaft - Austrian Research Council (FFG)

# Research Supervision and Teaching

## **PhD Supervision**

### **NUI Galway**

Ongoing since 2017 (co-supervision with Prof. Sean Ryder, English Department & Moore Institute): Edward Kearns, PhD Digital Arts & Humanities: *Annotation of Narrative Units* 

Ongoing since 2017: Tobias Daudert, PhD Computer Science: Analyzing Market Sentiment

Ongoing since 2016: Omnia Zayed, PhD Computer Science: Metaphor Analysis in Social Media

Ongoing since 2014: Andrejs Ābele, PhD Computer Science: Linked Data Profiling

Graduated 2018: Sapna Negi, PhD Computer Science: Suggestion Mining from Text

Graduated 2016: Mihael Arcan, PhD Computer Science: Machine Translation of Domain-Specific Expressions within Ontologies and Documents

Graduated 2016: Nitish Aggarwal, PhD Computer Science: Leveraging Wikipedia-based Features for Entity Relatedness and Recommendation

Graduated 2013: Georgeta Bordea, PhD Computer Science: Domain adaptive extraction of topical hierarchies for Expertise Mining

Graduated 2012: Sean O'Riain, PhD Computer Science: Semantic Paths in Business Filings Analysis

#### **University of South-Africa (Extraordinary Professor)**

Ongoing since 2013: Friedel Wolff, PhD Computer Science: Semantically Aware Translation Memories

### PhD External Committee Member

Graduated 2018: Kim Schouten, PhD Economics, Erasmus University Rotterdam, the Netherlands

Graduated 2016: Sebastian Walter, PhD Computer Science, Universität Bielefeld, Germany

Graduated 2014: Stefano Faralli, PhD Computer Science, Sapienza University of Rome, Italy

Graduated 2014: Rilwan Basanya, PhD Computer Science, Universita' di Pisa, Italy

Graduated 2011: Bo Fu, PhD Computer Science, Trinity College Dublin, Ireland

Graduated 2011: Elena Montiel Ponsoda, PhD Applied Linguistics, UPM, Spain

Graduated 2011: Pinar Wennerberg, PhD Computational Linguistics, LMU München, Germany

Graduated 2009: Antonio Toral, PhD Computational Linguistics, Universitat d'Alacant, Spain

Graduated 2008: Gijs Geleijnse, PhD Industrial Design, Technische Universiteit Eindhoven, the Netherlands

## MSc Supervision

### **NUI Galway**

Graduated 2016: Bianca Pereira, MSc Computer Science: Using Knowledge Base Segmentation for Entity Linking

### Saarland University, Germany

Graduated 2007: Mario Crespo Miguel, MSc Computational Linguistics: *Domain-specific English-to-Spanish Translation of FrameNet* 

Graduated 2006: Nicolas Weber, MSc Computer Science: Webbasiertes Ontologielernen (Web-based Ontology Learning)

Graduated 2005: Srikanth Ramaka, MSc Computer Science: A Machine Learning Based Approach to Ontology Population

Graduated 2004: Daniel Olejnik, Diplom Computer Science: OntoLT: Ein Protege Plug-in fuer Textbasierte Ontologieextraktion (OntoLT: A Protege Plug-in for Text-based Ontology Extraction)

Graduated 2002: Diana Raileanu, Diplom Computational Linguistics: *Domain Specific Semantic Tagging* 

Graduated 2001: Bogdan Sacaleanu, Diplom Computational Linguistics: *Domain Specific Semantic Lexicon Tuning and Extension* 

## **University Seminars**

#### **NUI Galway**

Since 2016: CT5101 Natural Language Processing, MSc in Data Analytics

### Saarland University, Germany

2007, 2008: Lectures on Semantics, Disambiguation, Semantic Web, BSc in Computer Science

2006: Ontologies and Lexical Semantics, MSc (equivalent) in Computational Linguistics

2002: Lecture on WordNet in the Semantic Web, MSc (equivalent) in Computational Linguistics

1999, 2000: Lexical Semantics in Information Systems, MSc (equivalent) in Computational Linguistics

### **Invited Seminars**

Summer School on Linguistic Linked Open Data (12<sup>th</sup> EUROLAN Summer School): 2-day courses on *Linguistic Linked Data in Sentiment Analysis; Taxonomy Extraction*, 2015, Sibiu, Romania

MERAKA institute: week-long course on *Ontologies and Word Meaning in Natural Language Processing*, 2008, Pretoria, South-Africa

Semantic Web Company: 1-day course on Text Mining & Semantic Search, 2008, Vienna, Austria

ACL/HCSNet Advanced Program in Natural Language Processing: 2-day course on *Lexical Semantics* and *Ontologies*, 2006, Melbourne, Australia

1<sup>st</sup> SEKT Summer School on the Semantic Web: lecture on *Human Language Technology for the Semantic Web*, 2005, Ljubljana, Slovenia

2<sup>nd</sup> Summer School on Ontological Engineering and the Semantic Web: week-long course on *Language Technology for the Semantic Web*, 2004, Cercedilla, Spain

1<sup>st</sup> Summer School on Ontological Engineering and the Semantic Web: week-long course on *Language Technology for the Semantic Web*, 2003, Cercedilla, Spain

PhD Program in Applied Linguistics, (NLP area): 3-day course on *Computational Lexical Semantics*, Institut de Linguistica Aplicada (IULA), Universitat Pompeu Fabra, 2003, Barcelona, Spain

EUROLAN Summer School: 2-day courses on *Domains and Senses; Semantic Annotation in Cross-Lingual Information Retrieval*, 2001, Iasi, Romania

EUROLAN Summer School: 2-day course on *Concepts in Multilingual Information Retrieval*, 1999, Iasi, Romania