Roberto Navigli Curriculum Vitæ

Rome, May 7, 2024

Part I – General Information

Part II – Education

Type	Year	Institution	Notes (Degree, Experience, etc.)	
Ph.D.	2007	Sapienza	PhD in Computer Science, advisor: prof. Paola Velardi. Thesis:	
			"Structural Semantic Interconnections: a Knowledge-Based WSD	
			Algorithm, its Evaluation and Applications", Winner of the 2017	
			AI*IA "Marco Cadoli" national prize for the best PhD	
			thesis in AI.	
B.Sc.+M.Sc.	2001	Sapienza	Master degree in Computer Science, 110/110 cum laude.	
			Thesis: "An automatic algorithm for domain ontology learning",	
			supervisor: prof. Paola Velardi.	

Part III – Appointments

III(A) – Academic and Spinoff Appointments

Start	End	Institution	Position	
09/2017	today	Sapienza	full professor, Dipartimento di Ingegneria Informatica,	
			Automatica e Gestionale (previously at Dipartimento di	
			Informatica), Università di Roma "La Sapienza".	
03/2016	today	Babelscape	co-founder	
12/2010	08/2017	Sapienza	associate professor, Dipartimento di Informatica, Università di	
			Roma "La Sapienza".	
03/2007	12/2010	Sapienza	assistant professor, Dipartimento di Informatica, Sapienza.	
05/2003	03/2007	Sapienza	research fellow, Dipartimento di Informatica, Sapienza.	

III(B) – Other Appointments

Start	End	Institu	tion	Position
05/2000	04/2003			software engineer
		S.p.A.	Roma	

$\mathrm{III}(\mathrm{C})$ – Research visits and stays

Start	End	Institution	Position
01/2015	01/2015	Center for Advanced Studies	Invited Visiting Fellow
		(CAS), LMU, Germany	
2010	2012	University of Wolverhampton	Visiting professor
		(UK)	
11/2009	12/2009	University of Edinburgh (UK)	Visiting researcher
01/2009	02/2009	University of Edinburgh (UK)	Visiting researcher
09/2008	09/2008	University of Sussex (UK)	Visiting research fellow
01/2008	02/2008	University of Edinburgh (UK)	Visiting researcher
11/2006	05/2007	University of Sussex (UK)	Visiting research fellow
01/2006	04/2006	University of Edinburgh (UK)	Visiting researcher

$\mathrm{III}(\mathrm{D})$ – Institutional activities

Start End Activity

2023	today	Coordinator of the Ph.D. in Engineering in Computer Science, Department of
		Computer, Control and Management Engineering.
2012	2021	Department contact person for orientation and high schools, including organizing Open
		Doors at Sapienza and other activities including popular seminars at schools and Work
		School Alternation.
2022	today	Member of the Doctoral College of the National PhD in Artificial Intelligence .
2021	2021	Member of the Adjudicating Committee for the admission to the XXXVII cycle of the
		Ph.D. in Artificial Intelligence.
2021	today	Member of the Doctoral College of the PhD in Engineering in Computer Science.
2015	2021	Responsible faculty for organizing the OpenDI orientation day.
2013	2021	Member of the Computer Science Doctoral College.
2010	2014	Member of the Department Scientific Committee.
2011	2014	Member of the Department Library Committee.
2009	2009	Co-organizer of the Department of Computer Science Workshop.
2008	2008	Member of the Adjudicating Committee for the admission to the XXIV cycle of the
		Ph.D. in Computer Science.
2007	2009	Department website reference faculty.
2007	2010	Member of the Excellence Path Committee.
L		

III(E) – Habilitations

Year	Habilitation
2012	Italian habilitation to full professor with maximum score.
2014	Qualification française à professeur des universités, French habilitation to full
	professor.

Part IV – Teaching experience

Year	Institution	Lecture/Course
2024	Sapienza	Lecturer of the Elective in AI (in English, AI & Robotics Master's degree).
2024	Sapienza	Lecturer of the Fundamentals of Computer Science course (1st year B.Sc. in
	_	Management Engineering).
2024	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
	_	in AI & Robotics + Engineering in Computer Science).
2023	Sapienza	Lecturer of the Elective in AI (in English, AI & Robotics Master's degree).
2023	Sapienza	Lecturer of the Fundamentals of Computer Science course (1st year B.Sc. in
	-	Management Engineering).
2023	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
	_	in AI & Robotics + Engineering in Computer Science).
2022	Sapienza	Lecturer of the Elective in AI (in English, AI & Robotics Master's degree).
2022	Sapienza	Lecturer of the Fundamentals of Computer Science course (1st year B.Sc. in
	_	Management Engineering).
2022	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in AI & Robotics + Engineering in Computer Science).
2021	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
		computer science).
2021	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2020	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
		computer science).
2020	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2019	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
		computer science).
2019	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2018	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
		computer science).
2018	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2017	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
	-	computer science).
2017	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2016	,	Lecturer of a 3-hour tutorial on "Semantic Representations of Word Senses
	Germania	and Concepts" ad ACL, NLP reference conference (with Camacho-Collados,
		Iacobacci and Pilehvar). The tutorial had a record number of 166
2016	<u> </u>	participants.
2016	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
0010	а ·	computer science).
2016	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
2016	Q	in Computer Science).
2016	Sapienza	Lecturer of the Programming Methodologies course (first year, B.Sc. in
2015	Capianes	computer science). Teacher of the GameInvaders "programming from scratch" course for high
2015	Sapienza	
2015	Sapienza	school students (11 lectures, 2 hours each). Lecturer of the Programming Methodologies course (first year, B.Sc. in
2010	Sapieliza	
2015	Sapionza	computer science). Lecturer of the Natural Language Processing course (in English, M.Sc. degree
2010	Sapienza	in Computer Science).
2015	Sapienza	Lecturer of an introductory lecture on computer science, LUISS Summer
2010	Dapienza	School.
		501001.

2015	EUROLAN	Invited instructor, 12th EUROLAN Summer School, Sibiu, Romania (course:
	School	3 ore).
2014	Sapienza	Lecturer of the Programming Methodologies course.
2014	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2014	Sapienza	Lecturer of an introductory lecture on computer science, LUISS Summer
		School.
2013	Sapienza	Lecturer of the Programming Methodologies course.
2013	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
		in Computer Science).
2013	Università	Invited Instructor for a 3-hour tutorial on computational semantics,
	di Bari	Laboratori dal Basso.
2012	Sapienza	Lecturer of the Programming Methodologies course.
2012	Sapienza	Lecturer of the Natural Language Processing course (in English, M.Sc. degree
	77.1	in Computer Science).
2011	Univ. of	ESSLLI Lecturer (European Summer School on Language, Logic and
2010	Ljubljana	Information).
2010	Univ. of	ESSLLI Lecturer (European Summer School on Language, Logic and
0010	Copenhagen	Information).
2010	Sapienza	Lecturer of the Machine Learning course (3rd year, B.Sc. in computer science).
2009	Sapienza	Lecturer of the Machine Learning course.
2009	Borovets,	Invited Instructor of a 3-hour tutorial on graph-based at the RANLP
2008	Bulgaria U. Basque	conference (Recent Advances in Natural Language Processing). Invited Instructor of a 3-hour introductory lecture on Word Sense
2008	Country	Disambiguation.
2008	Sapienza	Lecturer of the Machine Learning course.
2008	Sapienza	Instructor of the Programming Laboratory course (1st year, B.Sc. in computer
2001	Sapienza	science).
2007	Sapienza	Teaching Assistant of the Computer Architecture course (primo anno, laurea
2001	Sapienza	triennale in informatica).
2007	Sapienza	Teaching Assistant of the Programming II course (1st year, B.Sc. in computer
	~~~r	science).
2006	Sapienza	Teaching Assistant of the Computer Architecture course.
2006	Sapienza	Teaching Assistant of the Programming II course.
2005	Sapienza	Teaching Assistant of the Computer Architecture course.
2004	Sapienza	Teaching Assistant of the Computer Architecture course.
2004	Sapienza	Teaching Assistant of the Programming II course.
2003	Sapienza	Teaching Assistant of the Computer Architecture course.

Supervision of more than 120 B.Sc. and M.Sc. students in computer science on Natural Language Processing, AI, video game programming and other topics.

## Part V – Society memberships, Awards and Honors

V(A) – Awards and Prizes

Year	Title
2023	ACL Fellow (https://aclweb.org/aclwiki/ACL_Fellows)
2023	ACL Outstanding Paper Award: What's the Meaning of Superhuman Performance in
	Today's NLU?
2023	Winner of the Artificial Intelligence Journal Prominent Paper Award 2023.
2022	ACL Best Resource Paper Award: DiBiMT: A Novel Benchmark for Measuring Word
	Sense Disambiguation Biases in Machine Translation
2021	NAACL Outstanding Paper Award: Unifying Cross-Lingual Semantic Role Labeling with
	Heterogeneous Linguistic Resources
2021	Both ERCs highlighted among the 15 ERC projects that have transformed science, top
	1% of ERC projects.
	https://www.uniroma1.it/en/notizia/two-sapienzas-erc-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-transformed-science-projects-have-trans
2020	Listed by Stanford among the World's Top 2% scientists
	https://www.uniroma1.it/en/notizia/sapienza-world-ranking-scientist
2018	IJCAI 2018 Early Career Spotlight, invited talk.
2017	Winner of the Artificial Intelligence Journal Prominent Paper Award 2017.
2017	First Italian to have won two prestigious ERC grants in computer science, an ERC
	Starting Grant (1.3 million euros) and an ERC Consolidator Grant (1.5 million euros).
2017,	Member of the ERC Starting Grant evaluation panel (PE6 - computer science)
2019,	since 2017. "Each ERC panel consists of a chairman and 10-16 members. The Panel Chair
2021,	and the Panel Members are selected by the ERC Scientific Council on the basis of their
-	scientific reputation. For each call, 25 high-level panels of eminent scientists and
	scholars have been assembled to take overall responsibility for the selection of
2015	the most promising candidates that will receive these significant grants."
2015	Winner of the META prize 2015 as the creator of BabelNet, "awarded on an annual basis to outstanding products or services supporting the European Multilingual Information
	Society". META (Multilingual Europe Technology Alliance) is an association with 817
	members, including universities and companies. http://www.meta-net.eu/meta-prize
2013	Winner of a Google Focused Research Award (with Hans Uszkoreit and Feiyu Xu,
2010	2013-2016) in Natural Language Understanding: "Language Understanding cum Knowledge
	Yield (LUcKY)".
2014	Winner of an <b>Ateneo "Award"</b> 2014 project.
2014	Best poster award at SEMANTiCS 2014, "Three birds (in the LLOD cloud) in one stone:
	BabelNet, Babelfy and the Wikipedia Bitaxonomy", joint with T. Flati.
2013	Best paper award nominee at ACL 2013, "Align, Disambiguate and Walk", joint with
	M. T. Pilehvar and David Jurgens.
2013	Winner of the biennial AI*IA "Marco Somalvico" National Prize in AI for young
	researchers (under 35) who carried out research in Italy and provided a significant personal
	contribution to the field of AI.
2012	Winner of one of the 32 Sapienza Research fellowship for scientific research reserved
	to under-40 professors.
2010	First Italian researcher to win an ERC Starting Grant in Computer Science $(1.3M)$
	euros).
2010	"What's up - Giovani Talenti" International Prize for scientific research,
	Campidoglio, Rome, 2010
2007	Winner of AI*IA "Marco Cadoli" National Prize for the Best Ph.D. Thesis in AI.
2008	Winner of a short visit research grant, Royal Society of Edinburgh.
2006	Winner of a mobility grant, INTEROP Network of Excellence.

Year	Title
2025	General Co-Chair of ACL 2025, reference conference in NLP.
2023	Area Chair of the European Summer School in Artificial Intelligence (ESSAI)
2023	Area Chair of AAAI 2023 (Association for the Advancement of Artificial Intelligence)
2023	Senior PC for IJCAI 2023.
2023	Senior Area Chair for ACL 2023 (Semantics: Sentence-level Semantics, Textual
	Inference, and Other Areas)
2023	Senior Area Chair for EACL 2023 (Information Extraction)
2022-	Senior Area Chair for ACL Rolling Review (ARR).
2023	Senior Meta Reviewer for ECAI 2023
2022	Senior Area Chair of IJCAI-ECAI 2022.
2022	Area Chair of AAAI 2022.
2021	Program Co-Chair of ACL-IJCNLP 2021, reference conference in NLP.
2020-	Action Editor of Transactions of the Association for Computational Linguistics (MIT
	Press), NLP reference journal.
2021	Senior Area Chair of IJCAI 2021.
2021	Area Chair of AAAI 2020 (Association for the Advancement of Artificial Intelligence).
2020	Area Chair of IJCAI 2020.
2020	Area Chair of ECAI 2020 (European Conference on Artificial Intelligence).
2020	Senior Program Committee member of AAAI 2020 (Association for the Advancement
	of Artificial Intelligence).
2019	Program Co-Chair of CliC-IT 2019, the Italian NLP conference.
2019	Area Chair di AAAI 2019 (Association for the Advancement of Artificial Intelligence).
2019	Senior Program Committee member of IJCAI 2019.
2018-today	
2012 2020	Intelligence and Intelligent Systems.
	Associate Editor of Artificial Intelligence (Elsevier).
2014-2021	Standing Elite Reviewer for Transactions of the Association for Computational
2018	Linguistics (TACL), reference fast-track journal in NLP. <b>Area Chair</b> of IJCAI-ECAI 2018 (International Joint Conference on Artificial
2018	Intelligence).
2018	Senior Program Committee member of AAAI 2018 (Association for the Advancement
2010	of Artificial Intelligence).
2017	Senior Program Committee member of AAAI 2017 (Association for the Advancement
2011	of Artificial Intelligence).
2016	Special track chair for ESWC 2017 (Extended Semantic Web Conference).
2016	Area chair of CLIC 2016 (Italian Conference on Computational Linguistics).
2016	Area chair of COLING 2016 (26th International Conference on Computational
	Linguistics).
2016	Area chair of *SEM 2016.
2015-2016	Advisory Board member of EACL (European Chapter of the Association for
	Computational Linguistics).
2014-2015	<b>Executive Board Member</b> (Membro del Direttivo) of the AIxIA association.
2010-2020	Editorial Board member of Natural Language Engineering (Cambridge University
	Press).
2015	Editorial Member of the special issue on Knowledge graphs, Journal of Web
	Semantics (Elsevier).
2015	Guest editor of Web Semantics (Elsevier), reference journal fo the Semantic Web.
2014-2015	Member of the executive board (comitato direttivo) of AIxIA (Associazione
	Italiana per l'Intelligenza Artificiale).
2014-today	
2014	<b>Program chair</b> di *SEM 2014, NLP and computational lexical semantics conference.
2013	Area chair of *SEM 2013, NLP and computational lexical semantics conference.
2013	Guest editor of Artificial Intelligence (Elsevier).
2013	Publication chair of ACL 2013, reference conference in NLP.

 ${\rm V(B)}$  – Editorial Boards, Editorships, Advisory Boards, Chairs, Program Committees

2013	Lab chair for CLEF 2013 (Cross Language Evaluation Forum).
2012	Track chair for WWW 2012, reference conference for Web research.
2012-today	Editorial Board Member of the book series "Text, Speech and Language Technology"
	(Springer).
2011-2013	Editorial Board Member (2011-2013) of Computational Linguistics (MIT Press),
	reference journal in NLP.
2011	Senior Program Committee member of IJCAI (International Joint Conference on
	Artificial Intelligence).
2010	Area chair for ACL 2010.
2010-today	Member of the Advisory Board of the NLP book series published by John Benjamins.
2009	Senior Program Committee member of IJCAI (International Joint Conference on
	Artificial Intelligence).
2007-2010	Member of the Executive Board of the Special Interest Group on the Lexicon
	(SIGLEX).
2007-today	Session Chair for conferences and workshops, including: ACL, EACL, EMNLP,
	COLING, WWW, RANLP, SemEval, IJCAI.
2006-today	Member of the <b>program committees</b> of the main AI and NLP conferences,
	including: ACL (2006-today), NAACL (2010-today), EACL (2009-today), COLING
	(2006-today), EMNLP (2006-today), RANLP (2007-today), FLAIRS (2006-2008, 2011),
	IJCAI (2009-today) e AAAI (2011-12, 2015-today).
2005-today	Reviewer for numerous international journals, including: ACM Surveys, ACM TOIS, ACM
	TSLP, AIJ, Computational Linguistics, CSL, IEEE TKDE, IEEE Intelligent Systems,
	DKE, Journal of Data Semantics, IEEE Computer, Information Systems, VLDB Journal,
	ACM TKDD, IEEE Transactions on ASLP, TACL, JAIR, ACM TWeb.

V(C) – Invited/Keynote Talks at Conferences, Workshops and Summer Schools

Year	Type	Conference
2024	invited	39th Italian Conference on Computational Logic (CILC), Rome, Italy
	speaker	
2024	invited	LLM event, Large Language Models: What They Are, Why They Are Important,
	speaker	and What They Fail At, Ca' Foscari, Venice, Italy
2024	invited	LLM event, What can (and cannot) do generative Natural Language Processing do
	speaker	in 2024?, Bologna, Italy
2023	invited	22nd IEEE/WIC International Conference on Web Intelligence and Intelligent
	speaker	Agent Technology (WI-IAT), Venice, Italy
2023	invited	European Summer School for Scientometrics (ESSS), Rome, Italy.
	speaker	
2023	invited	ChatGPT: illusions and promises, Turin, Italy
	speaker	
2023	invited	ForumPA: Who wrote it? Intellectual property in the time of generative AI, Rome,
	speakr	Italy
2022	invited	Fourth Iberoamerican and Third Indo-American Conference Knowledge Graph and
	speaker	Semantic Web Conference (KGSWC), Madrid, 21-23 November 2022
2022	invited	AIxIA Spotlight Seminars, online
	speaker	
2022	invited	2022 Conference of European Statistics Stakeholders (CESS), Rome, 20-22 October
	speaker	2022
2022	invited	Multilingual Digital Terminology Today conference, Padua, 16-17 June 2022
	speaker	
2021	invited	SBU NLP Talk Series, online, 23 June 2021
	speaker	
2021	invited	Evening Speech at the AILC Lectures on Computational Linguistics, Rome, Italy,
	speaker	16 June 2021
2021	invited	Goldman Sachs.
	speaker	
2021	invited	Facebook Artificial Intelligence Research (FAIR) seminars.
	speaker	

2021	invited	Leint Workshop on Multimond Empropriate and Electronic Louisons (MWE LEX)
2021	invited	Joint Workshop on Multiword Expressions and Electronic Lexicons (MWE-LEX),
2020	speaker invited	Barcelona, Spain.
2020		2020 International Conference on Computational Linguistics and Natural Language
2020	speaker invited	Processing (CLNLP), Seoul, South Korea. 5th SwissText & 16th KONVENS (SwissText+KONVENS 2020), Zurich,
2020		Swiss lext & 10th KONVENS (Swiss lext+KONVENS 2020), Zurich, Switzerland.
2020	speaker Invited	Applied Machine Learning Days (AMLD) at EPFL, Lausanne, Switzerland.
2020	speaker	Applied Machine Learning Days (AMLD) at EFFE, Lausanne, Switzenland.
2020	invited	Convegno dell'Associazione per l'Informatica Umanistica e la Cultura Digitale
2020	speaker	(AIUCD), Milan, Italy
2019	invited	Artificial Intelligence Symposium organized by the European Academy of Science
2015	speaker	Authorian Intelligence Symposium organized by the European Academy of Science
2019	invited	European Research Council, Brussels, Belgium, 20 September 2019.
2015	speaker	Duropean research Council, Drussels, Deigium, 20 September 2013.
2018	invited	EduIA - First Italian Conference on Education and AI, Roma Tre.
2010	speaker	
2018	invited	TranslatingEurope, Istituto di Alti Studi SSML Carlo Bo.
2010	speaker	TranslavingBaropo, isoloado al Titol Soual SSIAB Carlo Bol
2018	invited	Dagstuhl Seminar on "Knowledge Graphs", Schloss Dagstuhl.
2018	keynote	2018 Conference Chinese Knowledge Graph and Semantic Computing (CCKS),
	speaker	Tianjin, China.
2018	invited	Early Career Spotlight track at IJCAI-ECAI 2018, Stockholm, Sweden.
	speaker	
2018	keynote	2018 International Conference on Statistical Analysis of Textual Data (JADT),
	speaker	Rome, Italy.
2017	invited	Conference on Computational Approaches to Diversity in Interaction and Meaning,
	speaker	Venice, Italy.
2017	keynote	39th Conference on Translating and the Computer, London, UK.
	speaker	
2017	keynote	Recent Advances in Natural Language Processing (RANLP 2017), Varna, Bulgaria.
	speaker	
2017	keynote	3rd International Workshop on Natural Language Processing for Informal Text
	speaker	(NLPIT 2017) joint with The International Conference on Web Engineering (ICWE $$
		2017), Rome, Italy.
2017	keynote	1st Workshop on Sense, Concept and Entity Representations and their Applications
	speaker	(SENSE) joint with EACL 2017, Valencia, Spain.
2016	invited	Inaugural Conference of the Artificial Intelligence Research Institute (AIRI), South
	speaker	Korea, 11th October 2016.
2016	invited	WebNLG workshop: 2nd International Workshop on Natural Language Generation
	speaker	and the Semantic Web, Edinburgh, UK, September 6, 2016.
2016	invited	European Union Intellectual Property Office (EUIPO), 28th June, 2016.
2010	speaker	
2016	invited	DigiCosme Research Days 2016, evento annuale tenuto dai membri del laboratorio
2010	speaker	d'eccellenza DigiCosme, Centrale-Supélec.
2016	invited	Luxembourg BabelNet workshop, workshop monotematico sulla ricerca del prof.
	speaker	Navigli organizzato congiuntamente da EU Commission, EU Parliament e EU
2016	invitad	Publications Office, 2-3 marzo 2016.
2016	invited	Evento annuale ICT4INTEL, organizzato dal Sistema di informazione per la sigurazza della Ropubblica
	guest &	sicurezza della Repubblica.
2016	speaker invited	Google NLP Workshop 2016, Londra, 2016.
2010	keynote	DRONGO language festival, Utrecht, Netherlands.
2010	speaker	DIOINGO Ianguage resulvar, Otrecht, Ivetherianus.
	spearer	

2015	invited	Oxford Global Languages Symposium, Oxford (UK), organizzato da OUP.				
	speaker	••••••••••••••••••••••••••••••••••••••				
2015	invited	4th eLex conference on Electronic Lexicography in the 21st century: Linking lexical				
	speaker	data in the digital age.				
2015	invited	5th Lisbon Machine Learning School (LxMLS), Lisbon, Portugal.				
	speaker	0 ( )) / 0				
2015	invited	12th EUROLAN Summer School, Sibiu, Romania.				
	professor					
2015	invited	11th Summer School on Ontology Engineering and the Semantic Web (SSSW),				
	speaker	Bertinoro, Italy.				
2015	invited	TALN 2015 – 22ème Conférence sur le Traitement Automatique des Langues				
	speaker	Naturelles, Caen, France.				
2015	keynote	21st International Conference on Computational Linguistics (DIALOG), Moscow,				
	speaker	Russia.				
2015	invited	Multilingual Web Access (MWA) 2015 Workshop – colocated with WWW 2015,				
	speaker	Firenze.				
2014	keynote	NLP & DBpedia 2014 Workshop – colocated with ISWC 2014, Riva Del Garda,				
	speaker	Italy.				
2014	invited	Workshop on Cognitive Aspects of the Lexicon (CogALex-IV), Dublin, Ireland.				
	speaker					
2014	keynote	30th Spanish Conference on Natural Language Processing (SEPLN), Girona, Spain.				
	speaker					
2013	invited	6th International Joint Conference on Natural Language Processing (IJCNLP				
	speaker	2013), Nagoya, Japan.				
2013	keynote	10th International Conference on Terminology and Artificial Intelligence, Paris,				
	speaker	France.				
2013	keynote	14th International Conference on Intelligent Text Processing and Computational				
	speaker	Linguistics (CICLing), Samos, Greece.				
2013	keynote	3rd Workshop on Data Extraction and Object Search (DEOS), Oxford, UK.				
	speaker					
2013	invited	Laboratori dal Basso, Università di Bari.				
	tutorialist					
2012	invited	Dagstuhl Seminar su "The Multilingual Semantic Web", Schloss Dagstuhl.				
2012	invited	3rd Workshop on the Multilingual Semantic Web, Boston, USA.				
	speaker					
2011	invited	Google EMEA NLP Faculty Summit, Zurich, Switzerland.				
· · · · ·		6th International Workshop on Uncovering Plagiarism, Authorship, and Social				
	speaker	Software Misuse (PAN'12), Rome, Italy.				
2012	invited	3rd Italian Information Retrieval Workshop (IIR 2012), Bari, Italy.				
	speaker					
2012	invited	38th International Conference on Current Trends in Theory and Practice of				
2011	speaker	Computer Science (SOFSEM 2012), Špindlerův Mlýn, Czech Republic.				
2011	keynote	Recent Advances in Natural Language Processing (RANLP 2011), Borovets,				
2010	speaker	Bulgaria.				
2010	invited	Workshop AI*IA 2010 on Human Language Technologies for Italian, Brescia, Italy.				
	speaker					

Moreover, he has held **invited research seminars** at **more than 40 universities and research institutes**, including: U. of Prague, U. of Helsinki, CNRS Orsay/Paris Sud, U. Grenoble, U. Hannover, U. Fribourg, U. Paris 7, LMU Munich, Bing Munich, U. Bologna, U. Paris 13, U. Darmstadt, Max Planck Institute Saarbrücken, U. Politecnica de Madrid, UZH - Universität Zürich, National University of Ireland, Galway (DERI), Columbia U., U. Oxford, DFKI Berlin, U. Bari, U. Ca' Foscari, U. Milano Bicocca, Tokyo Institute of Technology, U. Politecnica de Valencia, U. Sheffield, U. Calabria, U. Trento, U. Heidelberg, U. Cambridge, U. Wolverhampton, U. Edinburgh, U. Basque Country, U. Sussex, IRST-ITC, U. Tor Vergata, IASI-CNR, ISTC-CNR.

#### V(D) – Press coverage

Some newspaper articles which cover prof. Navigli's scientific results:

- ANSA article (23/04/2024) on the first pre-trained Italian LLM, released by Sapienza NLP: "Ecco Minerva, la prima famiglia di LLM addestrati da zero in italiano" (Here is Minerva, the first family of LLMs trained from scratch in Italian).
- Sole 24 ore article (23/04/2024): "Ecco Minerva, l'IA in italiano che sfiderà ChatGpt" (Meet Minerva, the AI in Italian that will challenge ChatGpt).
- ANSA article (06/12/2023) on an invited talk at their generative AI event: "Macchine per scrivere": cosa sono e cosa possono fare (e non fare) le IA generative. ("Writing machines": what generative AIs are and what they can do (and not do)).
- Focus interview, 13/08/2022, on the future of intelligent personal assistants: "Come si addestra un software [di conversazione]" e "Le prossime frontiere"
- Articolo su Il Messaggero del 17/05/2021: Così le macchine decifreranno le lingue per noi
- Articolo su Il Tascabile Treccani del 15/06/2018: Come salvare una lingua?
- Articolo su **The Guardian del 23/02/2018**: Inside the OED: can the world's biggest dictionary survive the internet?
- Articolo su **Dnevnik del 02/03/2018**: Računalnik učimo brati časopisne članke (We teach computers to read newspaper articles).
- Articolo su ANSA del 23/02/2017: Wikipedia, è 'guerra' invisibile tra i robot correttori.
- Articolo sul TIME del 23/05/2016: "Redefining the modern dictionary".
- Articolo su La Nazione/Il Resto del Carlino/Il Giorno/Quotidiano Nazionale del 3/12/2015: "La lingua universale nasce in Rete: BabelNet, il dizionario del sapere".
- Intervista su Slator.com, 24/11/2015: "Deep Insights on Big News: Experts React to Spain's \$100M Language Tech Investment".
- Articolo su **Slator.com**, **29/10/2015**: "EU's BabelNet Is Starting to Break through to Business Applications".
- Articolo su **TAUS review**, April 2015: "BabelNet How the World Can Help Disambiguate Words".
- Articolo su **Repubblica del 2/11/2014**: "Lost in translation", relativo alle risorse computazionali allo stato dell'arte per la traduzione.
- Articolo su Corriere della Sera del 12/9/2010: "Quei tre supercervelloni: quando il talento paga", relativo al progetto ERC Starting Grant.

# Part VI – Funding Information [grants as PI-principal investigator or I-investigator]

VI(A) – Project Portfolio

## Overall project funds of around 4.5 million euros secured as personal share:

Year	Title	Program	Grant value
2023-2025	FAIR: Future AI Research	Next-Gen EU /	114M euros
	(Partenariato Esteso in AI)	Partenariati Estesi PNRR	(personal share:
			600k + euros)
2022-2025	CREATIVE: CRoss-modal	PRIN	ca. 897,000 euro
	understanding and gEnerATIon of		(personal share:
	Visual and tExtual content		ca. 321,000 euro)
2021-2022	Universal Semantic Annotator (USeA)	UE European Language	113,000 euro
		Grid	(personal share)
2019-2022	PerLIR: Personal Linguistic resources	PRIN	324,000 euro
	in Information Retrieval		(personal share:
			100,640 euro)
2018-2022	European Lexicographic Infrastructure	EU Infrastructure Project	4,999,967 euro ca.
	(ELEXIS), contract n. 731015		(personal share:
	(Sapienza coordinator)		ca. 450,000 euro)
2017-2022	Multilingual Open-text Unified	ERC Consolidator	1,500,000 euro ca.
	Syntax-independent SEmantics	Grant in "Computer	
	(MOUSSE), contract 726487 (PI)	science and informatics"	
2015-2017	SINAPSI (PI for NLP)	Joint Project	300,000 euro
		CINI-Sapienza	(personal share:
			100,000 euro)
2013-2016	Language Understanding cum	Google Focused	222,000 USD
	Knowledge Yield (LUcKY) (Co-PI	<b>Research Award</b> in	(personal share:
	with Hans Uszkoreit and Feiyu Xu,	"Natural Language	37,000 USD)
	DFKI Berlin)	Understanding"	
2013-2015	Linked Data as an enabler of	EU FP7 ICT-2013.4.1	1,482,000 euro
	cross-media and multilingual content		(personal share:
	analytics for enterprises across Europe		ca. 90,000 euro)
	(LIDER), contract number $610782$		
	(Sapienza PI)		
2011-2016	Multilingual Joint word sensE	ERC Starting Grant	1,300,000 euro ca.
	DIsambiguation (MultiJEDI), contract	in "Computer science and	
	number 259234 (PI)	informatics"	
2016	Gamification for Supporting	Sapienza Project 2015	10,000 euro
	Cross-Lingual Learning in Higher		
	Education (PI)		
2015	Women and Social Leadership	- •	36,925 euro
	(WeSocial) (PI)	"Awards" 2014	
2013	Combining the Structure and Content	Sapienza Project 2012	13,500 euro
	of Social Networks for Acquiring Novel,		
	Up-to-date Knowledge (PI)	<b>a</b>	
2012	Mining the Web to Acquire	Sapienza Project 2011	28,600 euro
	Multicultural and Multilingual		
	Semantic Networks (PI)		
2011	Acquisizione Automatica di Glossari e	Sapienza Project 2010	35,000 euro
	Ontologie Multilingue e Multimediali		
	(PI)		
2010	Analisi di reti sociali basata sul contesto	Sapienza Project 2009	41,600 euro
	(PI)		

## VI(B) – Technological Transfer

Co-founder (75% share) of Babelscape srl (http://babelscape.com), a **Sapienza startup company**, thanks to which he demonstrated **strong abilities in the technological transfer of the scientific research** carried out in the multilingual NLP lab. The company has several contracts with big companies and public bodies.

## Part VII – Research Activities

All the research activities are focused in the field of Natural Language Processing, with a focus on lexical and sentence-level semantics and, more recently, summarization, coreference resolution and Large Language Models. In particular, the following areas have been or are currently under investigation:

Keywords	Brief Description
Word Sense Disambiguation (WSD) & Induction	We have been working on the automatic resolution of lexical ambiguity, a key problem that underlies text comprehension. We have addressed this problem by proposing innovative knowledge-based, neural and neuro-symbolic approaches aimed at overcoming the various limitations of previous supervised systems, including the need to manually annotate large amounts of sentences in each language and the granularity of the reference sense inventories. We have also worked on the problem from different angles, such as inducing the meanings a word can express with graph-based algorithms and proposing new disambiguation paradigms based on lexical substitution, definition generation, and word sense comprehension.
Semantic Role Labeling	We have been working on addressing the various long-standing issues in labeling semantic roles, namely: the ability to abstract away from the English
(SRL)	language, thanks to the introduction of a novel language-independent frameset resource, VerbAtlas (http://verbatlas.org), and cross-lingual cross-inventory neural architecture for the SRL task. Moreover, given the focus on verbal SRL, we have successfully investigated how to scale the task to nominal role labeling given the lack of training data (and even the lack of wide-coverage nominal framesets).
Semantic Parsing	We work on the creation of language-independent representations of meaning for entire sentences, a task referred to as Semantic Parsing. Here we have worked on several improvements in cross-lingual Abstract Meaning Representation (AMR) and on the development of a brand-new language-independent representation, BabelNet Meaning Representation (BMR) – bound to our BabelNet knowledge graph – and its use for multilingual semantic parsing.
Taxonomy	Another key goal in my past research was to enable automatic reasoning by
and Ontology Learning	creating and utilizing structured knowledge navigation: this was achieved by putting forward novel methods to create taxonomic and ontological structures, including specialized ones, proposing new graph-based algorithmic techniques, such as OntoLearn and OntoLearn Reloaded, as well as an algorithm for the creation of a comprehensive taxonomy of an encyclopedic resource such as Wikipedia (the Wikipedia Bitaxonomy).
Knowledge Acquisition	We have addressed the topic of large-scale knowledge acquisition through innovative approaches that have enabled the creation of the largest multilingual knowledge graph, BabelNet (https://babelnet.org), from the automatic integration of more than 50 different knowledge resources (WordNet, Wikipedia, Wiktionary, Wikidata, and many others). BabelNet is now a very popular resource not only in NLP but also in many other areas of AI, used by more than 1000 research bodies and institutions. To complement these approaches, we have proposed several original Open Information Exraction algorithms that, by bringing together syntactic and semantic analysis, can extract millions of semantic relationships between concepts and entities.

Multilinguality	In recent years, also thanks to the creation of BabelNet, a whole new research					
	direction has opened up that aims to develop algorithms for multilingual NL					
	that I am exploring with my research group. Such algorithms have the peculiarity					
	of cross-referencing the information available in different languages, automatically					
	learning patterns that, on the one hand, take into account the complexities of each					
	language and, on the other hand, leverage their interactions to improve performance					
	in language comprehension. This dimension affects all research areas pursued in my					
	group, including Word Sense Disambiguation (from Babelfy to more recent models					
	like AMuSE-WSD), Semantic Role Labeling (InVeRo SRL), Semantic Parsing (e.g.					
	BabelNet Meaning Representation).					
Large	Starting from 2023, we have been working on creating pre-trained Large Language					
Language	Models (LLMs) in Italy, in the context of the Future AI Research (FAIR) project,					
Models	which brings together the AI community, with the goal of, first, creating the mis					
	know-how for large-scale endevours in this direction and, second, innovating LLMs					
	with the introduction of novel factuality and trustworthiness concepts.					

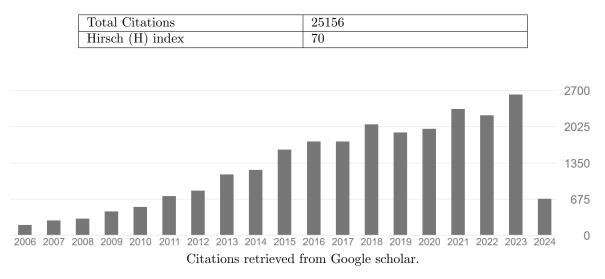
## Part VIII – Summary of Scientific Achievements

## VIII(A) – Bibliometrics

Co-author of more than 200 publications, out of which:

Product type	Number	Database	Start	End
Journal papers [international]	38	Google Scholar	2002	2024
Conference papers [international]	190	Google Scholar	2002	2024
Workshop papers [international]	22	Google Scholar	2003	2022
Book chapters [scientific]	5	Google Scholar	2004	2022

- 57 papers on A*-class journals and conferences according to the Australian CORE classification and Q1 according to Scimago (among which: 1 ACM Computing Surveys, 2 IEEE Transactions on Pattern Analysis and Machine Intelligence, 5 Computational Linguistics, 7 Artificial Intelligence Journal, 1 Information Systems, 1 Knowledge-based Systems; 51 ACL, 16 IJCAI, 3 WWW, 11 AAAI).
- 38 papers on A-class journals and conferences (among which: 2 Natural Language Engineering, 1 JAIR, 2 IEEE Intelligent Systems; 8 EACL, 17 NAACL, 27 EMNLP, 3 COLING, 4 ISWC, 2 CIKM, 1 ECAI).



#### VIII(B) – Other international achievements

- Creation and management of the Sapienza NLP group, currently with 1 post-doc and 11 Ph.D. students plus numerous visitors, all with publications in the top conferences and results beyond the state of the art. Former students and collaborators now work at Amazon, Microsoft Bing, Huawei, University of Cambridge, University of Helsinki, University of Mannheim, among others. A list of Ph.D. students (excluding those who just started) follows:
  - 1. Luca Moroni: tema in fase di definizione (39esimo ciclo)
  - 2. Luca Gioffrè: tema in fase di definizione (39esimo ciclo)
  - 3. Lu Xu: tema in fase di definizione (39esimo ciclo)
  - 4. Tommaso Bonomo: Story understanding and storytelling (38esimo ciclo)
  - 5. Karim Ghonim: Multimodal understanding (38esimo ciclo)
  - 6. Lorenzo Proietti: Novel sentence semantic representations (38esimo ciclo)
  - 7. Stefano Perrella: Novel Machine Translation evaluation measures (38esimo ciclo)
  - 8. Francesco Molfese: New methods for commonsense reasoning (38esimo ciclo)
  - 9. Giuliano Martinelli: New approaches to coreference resolution (38esimo ciclo);
  - 10. Simone Tedeschi: NER e Entity linking multilingue (37esimo ciclo);
  - 11. Pere-Lluis Huguet Cabot: multilingual Information Extraction(37esimo ciclo);
  - 12. Alessandro Scirè: Text summarization multilingue (37esimo ciclo);
  - 13. Stefan Bejgu: Multilingual semantic reprensentations (37esimo ciclo);
  - 14. Riccardo Orlando: Multilingual Natural Language Understanding (37esimo ciclo);
  - 15. Cesare Campagnano: Semantic Role Labeling with applications (36esimo ciclo);
  - 16. Carlos Abelardo Lorenzo Martinez: Multilingual Semantic Parsing (36esimo ciclo);
  - 17. Simone Conia: Multilingual Semantic Role Labeling (35esimo ciclo);
  - 18. Edoardo Barba: Multilingual Word Sense Disambiguation and Alignment (35esimo ciclo);
  - 19. Federico Martelli: Multilingual Word-in-Context Disambiguation (35esimo ciclo);
  - 20. Luigi Procopio: Disambiguation and Semantic Parsing (35esimo ciclo);
  - 21. Niccolò Campolungo: Machine Translation and Word Sense Disambiguation (35esimo ciclo);
  - 22. Bianca Scarlini: the knowledge acquisition bottleneck and new explicit representations of meaning (34esimo ciclo);
  - 23. Michele Bevilacqua: state-of-the-art word sense disambiguation (34esimo ciclo);
  - 24. Rexhina Blloshmi: cross-lingual semantic parsing (34esimo ciclo);
  - 25. Caterina Lacerra: neural lexical substitution (34esimo ciclo);
  - 26. Andrea Di Fabio: multilingual resources for semantic role labeling (33esimo ciclo);
  - 27. Marco Maru: new approaches to Word Sense Disambiguation (33esimo ciclo);
  - 28. Tommaso Pasini: multilingual Word Sense Disambiguation on a large scale (31esimo ciclo);
  - 29. Ignacio Iacobacci: neural networks for novel representations of meanings (30esimo ciclo);
  - 30. José Camacho-Collados (partial supervision): multilingual knowledge-based semantic representations of meaning (30esimo ciclo) winner of a Google Ph.D. fellowship;
  - 31. Alessandro Raganato: a full-fledged multilingual pipeline beyond the state of the art (30esimo ciclo), now postdoc at the University of Helsinki;
  - 32. Claudio Delli Bovi: integrating syntax and semantics for large-scale Web information extraction (30esimo ciclo), now Applied Scientist in Natural Language Understanding at Amazon;
  - 33. Daniele Vannella: automatic acquisition and enrichment of large knowledge bases (28esimo ciclo);
  - 34. Tiziano Flati: Learning of a Multilingual Bitaxonomy of Wikipedia and its Application to Semantic Predicates (27esimo ciclo);
  - 35. Andrea Moro: Natural Language Understanding: from Raw Text to Disambiguated Concepts, Entities and Relations (27esimo ciclo), ora software engineer presso Microsoft Bing, Londra;
  - 36. Mohammad Taher Pilehvar: Semantic Signatures: Rich and Flexible Representations of Lexical Meanings (27esimo ciclo), now research associate at the University of Cambridge;
  - 37. Stefano Faralli: Ontology Learning from Scratch (27esimo ciclo), now researcher at Sapienza-Unitelma (formerly postdoc at the University of Mannheim);

- External member of several PhD committees: Université de Fribourg, Université de Grenoble, University of Coimbra, University of Melbourne, Roma Tor Vergata, University of Darmstadt, University of Canterbury, Universidad Politecnica de Catalunya, University of Munich LMU, University of Trento, La Trobe University.
- **Evaluator** for several research schemes: ERC Starting Grant, ERC Consolidator Grant, Future Emerging Technologies (FET), French ANR, Croatian, Portuguese, Belgian, Polish, Israeli projects, Italo-German projects and projects from Aix*Marseille and Università di Verona.
- Workshop co-organizer: "Semantics-Driven Statistical Machine Translation Theory and Practice (S2MT)", colocated with ACL 2015.
- Workshop co-organizer: "TEXAS: Taxonomy Extraction with Applications in Semantics", colocated with EMNLP 2014.
- Workshop co-organizer: "Collaboratively-built knowledge sources and Artificial Intelligence", colocated with AAAI 2010.

## Publications

Publications with more than 100 co-authors, including:

E. Agirre – University of the Basque Country, Spain, C. Baron – U. Leipzig, Germany, M. Baroni – U. Trento, N. Bel – U. Pompeu Fabra, Spain, B. Berendt – Humboldt University, Berlin, P. Bottoni - Sapienza, S. Brody - U. Edinburgh, M. Brümmer - U. Leipzig, Germany, J. Camacho-Collados -Sapienza, D. Ceccarelli - ISTI CNR, Pisa, F. Cecconi - Sapienza, P. Cimiano - U. Bielefeld, Germany, L. Cinque – Sapienza, M. Cornolti – U. Pisa, G. Crisafulli – Sapienza, A. Cucchiarelli – U. Politecnica delle Marche, M. Curzi – U. Politecnica delle Marche, P. D'Amadio – Sapienza, F. D'Antonio – U. Politecnica delle Marche, F. De Benedictis - Sapienza, O. De Lacalle - U. Basque Country, Spain, A. De Nicola – IASI CNR Roma, C. Delli Bovi – Sapienza, A. Di Marco – Sapienza, M. Ehrmann – Sapienza, L. Espinosa-Anke – U. Pompeu Fabra, Spain, S. Faralli – Sapienza, M. Federico – FBK, P. Ferragina – U. Pisa, N. Ferro – U. Padova, T. Flati – Sapienza, P. Forner – FBK, A. Gangemi – ISTC CNR Roma, O. Hargraves – Lexicographer, L. Hennig – DFKI, Germany, E. Hovy – ISI University of Southern California, I. Iacobacci – Sapienza, D. Jurgens – Sapienza/McGill, B. Keller – U. Sussex, S. Krause – DFKI, Germany, M. Lapata – U. Edinburgh, C. Lemke – U. Leipzig, Germany, H. Li – DFKI, Germany, K. Litkowski - CL Research, B. Magnini - FBK, A. Malizia - Universidad Carlos III de Madrid, D. McCarthy – U. Sussex, J. McCrae – U. Bielefeld, Germany, S. Mendes – Universidade de Lisboa, M. Missikoff – IASI CNR Roma, A. Moro – Sapienza, H. Müller – HES-SO, Svizzera, F. Neri – U. Politecnica delle Marche, S. Necsulescu – U. Pompeu Fabra, Spain, A. Ngonga Ngomo – U. Leipzig, Germany, R. Paredes – Universidad Politecnica de Valencia, F. Parisi Presicce – Sapienza, T. Pasini – Sapienza, R. Passonneau - Columbia University, USA, M. Petit - U. Namur, M. T. Pilehvar - Sapienza, S. Ponzetto – U. Heidelberg, A. Raganato – Sapienza, S. O. Rezendea – University of Sao Paulo, G. Rizzo – Eurecom, France, F. Ronzano – U. Pompeu Fabra, Spain, R. G. Rossic – University of Sao Paulo, P. Rosso - U. Politecnica de Valencia, J. M. Ruiz-Martínez - University of Murcia, H. Sack -U. di Potsdam, Germany, H. Saggion – U. Pompeu Fabra, Spain, D. Scarfini – Sapienza, R. A. Sinoara - University of Sao Paulo, A. Soroa - U. Basque Country, Spain, R. Speck - U. Leipzig, Germany, B. Stein – Bauhaus-Universität Weimar, F. Suchanek – Télécom ParisTech, France, L. Telesca – Sapienza, D. Toscani - Sapienza, R. Tronci - EURECOM, France, D. Tufis - RACAI, Romania, R. Usbeck - U. Leipzig, Germany, H. Uszkoreit - DFKI, Germany, D. Vannella - Sapienza, P. Velardi - Sapienza, D. Weissenborn – DFKI, Germany, L. Wesemann – U. Leipzig, Germany, F. Xu – DFKI, Germany.

## Ph.D. thesis

1. R. Navigli. Structural Semantic Interconnections: a Knowledge-Based WSD Algorithm, its Evaluation and Applications. *PhD Thesis*, Università di Roma "La Sapienza", Roma, Italy, 2007. Winner of the AI*IA "Marco Cadoli" prize 2007 for the Best Italian Ph.D. in AI. Vincitore del premio AI*IA per NeoDottori di Ricerca "Marco Cadoli" 2007 come miglior tesi italiana di dottorato in Intelligenza Artificiale.

#### Books

A. Hogan, E. Blomqvist, M. Cochez, C. d'Amato, G. de Melo, C. Gutiérrez, S. Kirrane, J. E. Labra Gayo, R. Navigli, S. Neumaier, A. Ngonga Ngomo, A. Polleres, S. M. Rashid, A. Rula, L. Schmelzeisen, J. F. Sequeda, S. Staab, A. Zimmermann. Knowledge Graphs. Synthesis Lectures on Data, Semantics, and Knowledge, Morgan & Claypool Publishers 2021, ISBN 978-3-031-00790-3, pp. 1-257

## White Papers

3. R. Cucchiara, F. Giannotti, D. Nardi, R. Navigli. AI for Future Italy: The CINI Vision and Recommendations. National CINI Lab AIIS (Artificial Intelligence and Intelligent Systems), endorsed by DIS (Dipartimento di Informazioni per la Sicurezza) of the Italian Presidency of the Council of Ministers, 2020.

#### Articles in International Journals (Refereed)

- 4. R. Navigli, S. Conia, B. Ross. Biases in Large Language Models: Origins, Inventory, and Discussion. ACM J. Data Inf. Qual. 15(2): 10, 2023, pp. 1-21.
- A. Hogan, E. Blomqvist, M. Cochez, C. d'Amato, G. de Melo, C. Gutiérrez, S. Kirrane, J. E. Labra Gayo, R. Navigli, S. Neumaier, A. Ngonga Ngomo, A. Polleres, S. M. Rashid, A. Rula, L. Schmelzeisen, J. F. Sequeda, S. Staab, A. Zimmermann. Knowledge Graphs. ACM Comput. Surv. 54(4): 71, 2022, pp. 1-37.
- T. Pasini, R. Navigli. Train-O-Matic: Supervised Word Sense Disambiguation with no (manual) effort. Artificial Intelligence, 279, 2020, pp. 1-22.
- J. Camacho-Collados, C. Delli Bovi, A. Raganato, R. Navigli. SenseDefs: a multilingual corpus of semantically annotated textual definitions - Exploiting multiple languages and resources jointly for high-quality Word Sense Disambiguation and Entity Linking. *Language Resources and Evaluation*, 53(2), 2019, pp. 251-278.
- R. Navigli, Federico Martelli. An overview of word and sense similarity. Natural Language Engineering, 25(6), 2019, pp. 693-714.
- R. A. Sinoara, J. Camacho-Collados, R. G. Rossic, R. Navigli, S. O. Rezendea. Knowledge-enhanced document embeddings for text classification. Knowledge-based Systems, 163, 2019, pp. 955-971.
- J. Camacho-Collados, C. Delli Bovi, A. Raganato, R. Navigli. SenseDefs: a multilingual corpus of semantically annotated textual definitions. *Journal of Language Resources and Evaluation*, 2019, 53(2), pp. 251-278.
- T. Flati, D. Vannella, T. Pasini, R. Navigli. MultiWiBi: the Multilingual Wikipedia Bitaxonomy Project. Artificial Intelligence, 241, Elsevier, 2016, pp. 66-102.
- J. Camacho-Collados, M. T. Pilehvar, R. Navigli. NASARI: Integrating Explicit Knowledge and Corpus Statistics for a Multilingual Representation of Concepts and Entities. *Artificial Intelligence*, 240, Elsevier, 2016, pp. 36-64. Winner of the Artificial Intelligence Journal Prominent Paper Award 2023.
- S. Krause, L. Hennig, A. Moro, D. Weissenborn, F. Xu, H. Uszkoreit, R. Navigli. Sar-graphs: A language resource connecting linguistic knowledge with semantic relations from knowledge graphs. *Journal of Web Semantics*, 37-38, Springer, 2016, pp. 112-131.
- D. Jurgens, M. T. Pilehvar, R. Navigli. Cross Level Semantic Similarity: A Evaluation Framework for Universal Measures of Similarity. *Language Resources and Evaluation*, 50(1), Springer, 2016, pp. 5-33.
- M. T. Pilehvar, R. Navigli. From Senses to Texts: An All-in-one Graph-based Approach for Measuring Semantic Similarity Artificial Intelligence. *Artificial Intelligence*, 228, Elsevier, 2015, pp. 95-128.

- C. Delli Bovi, L. Telesca, R. Navigli. Large-Scale Information Extraction from Textual Definitions through Deep Syntactic and Semantic Analysis. *Transactions of the Association for Computational Linguistics (TACL)*, 3, 2015, pp. 529-544.
- P. Bottoni, R. Navigli, F. Parisi-Presicce. Conditions, constraints and contracts: On the use of annotations for policy modeling. *Electronic Communication of the European Association of* Software Science and Technology, 73, 2015, pp. 1-20.
- D. Jurgens, R. Navigli. It's All Fun and Games until Someone Annotates: Video Games with a Purpose for Linguistic Annotation. *Transactions of the ACL (TACL)*, 2, 2014, pp. 449-464.
- A. Moro, A. Raganato, R. Navigli. Entity Linking meets Word Sense Disambiguation: A Unified Approach. Transactions of the ACL (TACL), 2, 2014, pp. 231-244, pp. 231-244.
- T. Pilehvar, R. Navigli. A Large-scale Pseudoword-basedEvaluation Framework for State-of-the-Art Word Sense Disambiguation. *Computational Linguistics*, 40(4), MIT Press, 2014, pp. 837-881.
- P. Velardi, S. Faralli, R. Navigli. OntoLearn Reloaded: A Graph-based Algorithm for Taxonomy Induction. *Computational Linguistics*, 39(3), MIT Press, 2013, pp. 665-707.
- A. Di Marco, R. Navigli. Clustering and Diversifying Web Search Results with Graph-Based Word Sense Induction. *Computational Linguistics*, 39(3), MIT Press, 2013, pp. 709-754.
- E. Hovy, R. Navigli and S. Ponzetto. Collaboratively builtsemi-structured content and Artificial Intelligence: the story so far. Artificial Intelligence, 194, Elsevier, 2013, pp. 2-27.
- B. Magnini, M. Baroni, M. Federico, R. Navigli. Recent Advancements in Human Language Technology in Italy. *Intelligenza Artificiale*, 7(2), IOS Press, 2013, pp. 91-100.
- R. Navigli. BabelNet and Friends: A manifesto for multilingual semantic processing. Intelligenza Artificiale, 7(2), IOS Press, 2013, pp. 165-181.
- R. Navigli and S. Ponzetto. BabelNet: TheAutomatic Construction, Evaluation and Application of a Wide-Coverage Multilingual Semantic Network. *Artificial Intelligence*, 193, Elsevier, 2012, pp. 217-250. Winner of the Artificial Intelligence Journal Prominent Paper Award 2017.
- 27. T. Flati, R. Navigli. The CQC Algorithm: Cyclingin Graphs to Semantically Enrich and Enhance a Bilingual Dictionary, *Journal of Artificial Intelligence Research (JAIR)*, 34, 2012, pp. 135-171.
- R. Navigli, M. Lapata. An Experimental Study of Graph Connectivity for Unsupervised Word Sense Disambiguation, *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 32(4), 2010, pp. 678-692.
- R. Navigli.Word Sense Disambiguation: a Survey, ACM Computing Surveys, 41(2), ACM Press, 2009, pp. 1-69.
- A. De Nicola, M. Missikoff, R. Navigli. A Software Engineering Approach to Ontology Building, Information Systems, 34(2), Elsevier, 2009, pp. 258-275.
- D. McCarthy, R. Navigli. The English Lexical Substitution Task, Language Resources and Evaluation, 43(2), Springer, 2009, pp. 139-159.
- P. Velardi, R. Navigli, P. D'Amadio. Mining the Web to Create Specialized Glossaries, *IEEE Intelligent Systems*, 23(5), 2008, pp. 18-25.
- 33. R. Navigli. A Structural Approach to the Automatic Adjudication of Word Sense Disagreements, Journal of Natural Language Engineering, 14(4), Cambridge University Press, 2008, pp. 547-573.
- 34. R. Navigli. Consistent Validation of Manual and Automatic Sense Annotations with the Aid of Semantic Graphs, *Computational Linguistics*, 32(2), MIT Press, June 2006, pp. 273-281.
- R. Navigli, P. Velardi. Structural Semantic Interconnections: a Knowledge-Based Approach to Word Sense Disambiguation, *IEEE Transactions on Pattern Analysis and Machine Intelligence* (*TPAMI*), 27(7), 2005, pp. 1063-1074.

- R. Navigli, P. Velardi. Learning Domain Ontologies from Document Warehouses and Dedicated Web Sites, *Computational Linguistics* 30(2), MIT Press, June 2004, pp. 151-179.
- R. Navigli, P. Velardi, A. Gangemi. Ontology Learning and Its Application to Automated Terminology Translation, *IEEE Intelligent Systems*, 18(1), 2003, pp. 22-31.
- M. Missikoff, R. Navigli, P. Velardi. Integrated Approach to Web Ontology Learning and Engineering, *IEEE Computer*, 35(11), 2002, pp. 60-63.

#### Chapters in International Books (Refereed)

- R. Navigli. Ontologies. The Oxford Handbook of Computational Linguistics (2nd edition, R. Mitkov, Ed.), Oxford University Press, To appear.
- 40. R. Navigli, S. Ponzetto. An Overview of BabelNet and its API for Multilingual Language Processing. In *The People's Web Meets NLP: Collaboratively Constructed Language Resources* (I. Gurevych and J. Kim, Eds.), *Series Theory and Applications of Natural Language Processing*, Springer, 2012, pp. 185-208.
- R. Navigli, P. Velardi. From Glossaries to Ontologies: Extracting Semantic Structure from Textual Definitions. In Ontology Learning and Population: Bridging the Gap between Text and Knowledge (P. Cimiano and P. Buitelaar, Eds.), Series information for Frontiers in Artificial Intelligence and Applications, Volume 167, IOS Press, 2008, ISBN: 1-58603-818-2, pp. 71-87.
- 42. P. Velardi, R. Navigli, A. Cucchiarelli, F. Neri. Evaluation of OntoLearn, a Methodology for Automatic Learning of Domain Ontologies. In Ontology Learning from Text: Methods, Evaluation and Applications (P. Buitelaar, P. Cimiano, and B. Magnini, Eds.), Series information for Frontiers in Artificial Intelligence and Applications, IOS Press, 2005, ISBN: 1-58603-523-5, pp. 92-106.
- M. Missikoff, R. Navigli, P. Velardi. Web Ontology Learning and Engineering: an Integrated Approach. In *Intelligent Technologies for Information Analysis* (N. Zhong, Ed.), Springer-Verlag, 2004, ISBN: 3-540-40677-8, pp. 223-242.
- R. Navigli. Ontology Learning from a Domain Web Corpus. In Web Mining: Applications and Techniques (A. Scime, Ed.), Idea Press, August 2004, ISBN: 1-59140-414-2, pp. 69-98.

#### **Editorials and Conference Reports**

- 45. R. Navigli, Fabian M. Suchanek. Editorial. Journal of Web Semantics, 30, Elsevier, 2015, pp. 1-2.
- E. H. Hovy, R. Navigli, S. P. Ponzetto. Editorial. Artificial Intelligence, 194, Elsevier, 2013, pp. 1.
- N. Ferro, P. Forner, H. Müller, R. Navigli, R. Paredes, P. Rosso, B. Stein, D. Tufis: CLEF 2013: information access evaluation meets multilinguality, multimodality, and visualization, *SIGIR Forum*, vol. 47, 2013, pp. 15-20.
- R. Navigli. AAAI 2005 Spring Symposium Series, Conference Report in Intelligenza Artificiale, 2(2), p. 52.

#### Papers in Proceedings of International Conferences (Refereed)

- A. Scirè, Simone Conia, Simone Ciciliano, R. Navigli. Echoes from Alexandria: A Large Resource for Multilingual Book Summarization. Proc. of ACL (Findings) 2023, pp. 853-867
- A. C. Martinez Lorenzo, P. Huguet Cabot, R. Navigli. AMRs Assemble! Learning to Ensemble with Autoregressive Models for AMR Parsing. Proc. of ACL 2023, pp. 1595-1605
- A. C. Lorenzo, P. Huguet Cabot, R. Navigli. Cross-lingual AMR Aligner: Paying Attention to Cross-Attention. Proc. of ACL (Findings) 2023, pp. 1726-1742
- P. Vasylenko, P. Huguet Cabot, A. C. Martinez Lorenzo, R. Navigli. Incorporating Graph Information in Transformer-based AMR Parsing. Proc. of ACL (Findings) 2023, pp. 1995-2011

- P. Huguet Cabot, S. Tedeschi, A. Ngonga Ngomo, R. Navigli. REDFM: a Filtered and Multilingual Relation Extraction Dataset. Proc. of ACL 2023, pp- 4326-4343
- R. Orlando, S. Conia, R. Navigli. Exploring Non-Verbal Predicates in Semantic Role Labeling: Challenges and Opportunities. Proc. of ACL (Findings) 2023, pp. 12378-12388
- 55. S. Tedeschi, J. Bos, T. Declerck, J. Hajic, D. Hershcovich, E. H. Hovy, A. Koller, S. Krek, S. Schockaert, R. Sennrich, E. Shutova, R. Navigli. What's the Meaning of Superhuman Performance in Today's NLU? Proc. of ACL 2023, pp. 12471-12491. Winner of an outstanding paper award!
- E. Barba, N. Campolungo, R. Navigli. DMLM: Descriptive Masked Language Modeling. Proc. of ACL (Findings) 2023, pp. 12770-12788
- L. Procopio, S. Conia, E. Barba, R. Navigli. Entity Disambiguation with Entity Definitions. Proc. of EACL 2023, pp. 1289-1295
- 58. A. Purificato, **R. Navigli**. APatt at SemEval-2023 Task 3: The Sapienza NLP System for Ensemble-based Multilingual Propaganda Detection. Proc. of SemEval-2023, pp. 382-388
- S. Conia, E. Barba, A. Scirè, R. Navigli. Semantic Role Labeling Meets Definition Modeling: Using Natural Language to Describe Predicate-Argument Structures. Proc. of EMNLP (Findings) 2022, pp. 4253-4270
- S. Perrella, L. Proietti, A. Scirè, N. Campolungo, R. Navigli. MaTESe: Machine Translation Evaluation as a Sequence Tagging Problem. Proc. of WMT 2022, pp. 569-577
- 61. N. Campolungo. F. Martelli, F. Saina, R. Navigli. DIBIMT: A Novel Benchmark for Measuring Word Sense Disambiguation Biases in Machine Translation. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022. Winner of the best resource paper award!
- 62. E. Barba, L. Procopio, R. Navigli. ExtEnD: Extractive Entity Disambiguation. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022.
- 63. S. Conia and R. Navigli. Probing for Predicate Argument Structures in Pretrained Language Models. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022.
- 64. M. Maru, S. Conia, M. Bevilacqua, R. Navigli. Nibbling at the Hard Core of Word Sense Disambiguation. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022.
- 65. C. Campagnano, S. Conia and R. Navigli. SRL4E Semantic Role Labeling for Emotions: A Unified Evaluation Framework. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022.
- C. Martinez, M. Maru, R. Navigli. Fully-Semantic Parsing and Generation: the BabelNet Meaning Representation. Proc. of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Dublin, Ireland, 22-27th May, 2022.
- 67. S. Tedeschi and R. Navigli. MultiNERD: A Multilingual, Multi-Genre and Fine-Grained Dataset for Named Entity Recognition (and Disambiguation). Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2022), Seattle, USA, 10-15th July, 2022, pp. 801-812.
- S. Tedeschi, F. Martelli, R. Navigli. ID10M: Idiom Identification in 10 Languages. Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2022), Seattle, USA, 10-15th July, 2022, pp. 2715-2726.
- N. Campolungo, T. Pasini, D. Emelin, R. Navigli. Reducing Disambiguation Biases in NMT by Leveraging Explicit Word Sense Information. Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2022), Seattle, USA, 10-15th July, 2022, pp. 4824-4838.

- B. Scarlini, T. Pasini, R. Navigli. Visual Definition Modeling: Challenging Vision Language Models to Define Words and Objects. Proc. of the 36th AAAI Conference on Artificial Intelligence (AAAI 2022), Online, 22nd February-1st March, 2022.
- S. Pepe, E. Barba, R. Blloshmi, R. Navigli. STEPS: Semantic Typing of Event Processes with a Sequence-to-Sequence Approach. Proc. of the 36th AAAI Conference on Artificial Intelligence (AAAI 2022), Online, 22nd February-1st March, 2022.
- 72. R. Navigli, A. C. Martinez Lorenzo, R. Blloshmi. BabelNet Meaning Representation: A Fully Semantic Formalism to Overcome Language Barriers. Proc. of the 36th AAAI Conference on Artificial Intelligence (AAAI 2022), Online, 22nd February-1st March, 2022.
- 73. A. El Sheikh, M. Bevilacqua and R. Navigli. Integrating Personalized PageRank into Neural Word Sense Disambiguation. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 9092-9098.
- 74. C. Lacerra, R. Tripodi. R. Navigli. GeneSis: A Generative Approach to Substitutes in Context. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 10810-10823.
- 75. R. Blloshmi, T. Pasini, N. Campolungo, S. Banerjee, R. Navigli and G. Pasi. IR like a SIR: Sense-enhanced Information Retrieval for Multiple Languages. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 1030-1041.
- 76. E. Barba, L. Procopio and R. Navigli. ConSeC: Word Sense Disambiguation as Continuous Sense Comprehension. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 1492-1503.
- 77. R. Tripodi, S. Conia and R. Navigli. UniteD-SRL: A Unified Dataset for Span- and Dependency-Based Multilingual and Cross-Lingual Semantic Role Labeling. Findings of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 2293-2305.
- 78. P. Huguet Cabot and R. Navigli. REBEL: Relation Extraction By End-to-end Language generation. Findings of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 2370-2381.
- 79. S. Tedeschi, V. Maiorca, N. Campolungo, F. Cecconi and R. Navigli. WikiNEuRal: Combined Neural and Knowledge-based Silver Data Creation for Multilingual NER. Findings of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 2521-2533.
- S. Tedeschi, S. Conia, F. Cecconi and R. Navigli. Named Entity Recognition for Entity Linking: What Works and What's Next. Findings of 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Punta Cana, Dominican Republic, pp. 2584-2596.
- R. Blloshmi, M. Bevilacqua, E. Fabiano, V. Caruso, R. Navigli. SPRING Goes Online: End-to-End AMR Parsing and Generation. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing: System Demonstrations (EMNLP 2021), Punta Cana, Dominican Republic, pp. 134-142.
- R. Orlando, S. Conia, F. Brignone, F. Cecconi, R. Navigli. AMuSE-WSD: An All-in-one Multilingual System for Easy Word Sense Disambiguation. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing: System Demonstrations (EMNLP 2021), Punta Cana, Dominican Republic, pp. 298-307.
- 83. S. Conia, R. Orlando, F. Brignone, F. Cecconi, R. Navigli. InVeRo-XL: Making Cross-Lingual Semantic Role Labeling Accessible with Intelligible Verbs and Roles. Proc. of 2021 Conference on Empirical Methods in Natural Language Processing: System Demonstrations (EMNLP 2021), Punta Cana, Dominican Republic, pp. 319-328.

- 84. E. Barba, L. Procopio, C. Lacerra, T. Pasini, R. Navigli. Exemplification Modeling: Can You Give Me an Example, Please? Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 3779-3785.
- L. Procopio, E. Barba, F. Martelli, R. Navigli. MultiMirror: Neural Cross-lingual Word Alignment for Multilingual Word Sense Disambiguation. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 3915-3921.
- C. Lacerra, T. Pasini, R. Tripodi, R. Navigli. ALaSca: an Automated Approach for Large-Scale Lexical Substitution. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 3836-3842.
- 87. R. Blloshmi, S. Conia, R. Tripodi, R. Navigli. Generating Senses and RoLes: An End-to-End Model for Dependency- and Span-based Semantic Role Labeling. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 3786-3793.
- R. Navigli, M. Bevilacqua, S. Conia, D. Montagnini, F. Cecconi. Ten Years of BabelNet: A Survey. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 4559-4567.
- M. Bevilacqua, T. Pasini, A. Raganato, R. Navigli. Recent Trends in Word Sense Disambiguation: A Survey. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI 2021), Online, 19-26th August, 2021, pp. 4330-4338.
- 90. E. Barba, T. Pasini, R. Navigli. ESC: Redesigning WSD with Extractive Sense Comprehension. Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2021), Online, 6-11th June, 2021, pp. 4661-4672.
- 91. L. Procopio, R. Tripodi, R. Navigli. SGL: Speaking the Graph Languages of Semantic Parsing via Multilingual Translation. Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2021), Online, 6-11th June, 2021, pp. 325-337.
- 92. S. Conia, A. Bacciu, R. Navigli. Unifying Cross-Lingual Semantic Role Labeling with Heterogeneous Linguistic Resources. Proc. of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2021), Online, 6-11th June, 2021, pp. 338-351. Winner of the outstanding paper award!
- 93. A. Calabrese, M. Bevilacqua, B. Ross, R. Tripodi, R. Navigli. AAA: Fair Evaluation for Abuse Detection Systems Wanted. Proc. of 13th ACM Web Science Conference 2021 (WebSci 2021), Online, 21-25th June, 2021, pp. 243-252.
- 94. S. Conia, R. Navigli. Framing Word Sense Disambiguation as a Multi-Label Problem for Model-Agnostic Knowledge Integration. Proc. of the Conference of the European Chapter of the Association for Computational Linguistics (EACL 2021), Online, 19-23th April, 2021, pp. 3269-3275.
- 95. M. Bevilacqua, R. Blloshmi, **R. Navigli**. One SPRING to Rule Them Both: Symmetric AMR Semantic Parsing and Generation without a Complex Pipeline. Proc. of AAAI 2021.
- 96. T. Pasini, A. Raganato, **R. Navigli**. XL-WSD: An Extra-Large and Cross-Lingual Evaluation Framework for Word Sense Disambiguation. Proc. of *AAAI 2021*.
- 97. S. Conia, R. Navigli. Bridging the Gap in Multilingual Semantic Role Labeling: a Language-Agnostic Approach. Proc. of COLING 2020, pp. 1396-1410.
- S. Conia, R. Navigli. Conception: Multilingually-Enhanced, Human-Readable Concept Vector Representations. Proc. of COLING 2020, pp. 3268-3284.
- S. Conia, F. Brignone, D. Zanfardino, R. Navigli. InVeRo: Making Semantic Role Labeling Accessible with Intelligible Verbs and Roles. Proc. of *EMNLP 2020*, demos, pp. 77-84.
- 100. R. Blloshmi, R. Tripodi, R. Navigli. XL-AMR: Enabling Cross-Lingual AMR Parsing with Transfer Learning Techniques. Proc. of *EMNLP 2020*, pp. 2487-2500.

- B. Scarlini, T. Pasini, R. Navigli. With More Contexts Comes Better Performance: Contextualized Sense Embeddings for All-Round Word Sense Disambiguation. Proc. of *EMNLP 2020*, pp. 3528-3539.
- 102. M. Bevilacqua, M. Maru, **R. Navigli**. Generationary or "How We Went beyond Word Sense Inventories and Learned to Gloss". Proc. of *EMNLP 2020*, pp. 7207-7221.
- 103. C. Lacerra, M. Bevilacqua, T. Pasini, R. Navigli. CSI: A Coarse Sense Inventory for 85% Word Sense Disambiguation. Proc. of AAAI 2020, pp. 8123-8130.
- 104. B. Scarlini, T. Pasini, R. Navigli. SensEmBERT: Context-Enhanced Sense Embeddings for Multilingual Word Sense Disambiguation. Proc. of AAAI 2020, pp. 8758-8765.
- 105. F. Scozzafava, M. Maru, F. Brignone, G. Torrisi, R. Navigli. Personalized PageRank with Syntagmatic Information for Multilingual Word Sense Disambiguation. Proc. of ACL (demo) 2020, pp. 37-46.
- 106. M. Bevilacqua, R. Navigli. Breaking Through the 80% Glass Ceiling: Raising the State of the Art in Word Sense Disambiguation by Incorporating Knowledge Graph Information. Proc. of ACL 2020, pp. 2854-2864.
- 107. A. Calabrese, M. Bevilacqua, R. Navigli. Fatality Killed the Cat or: BabelPic, a Multimodal Dataset for Non-Concrete Concepts. Proc. of ACL 2020, pp. 4680-4686.
- 108. A. Calabrese, M. Bevilacqua, R. Navigli. EViLBERT: Learning Task-Agnostic Multimodal Sense Embeddings. Proc. of *IJCAI 2020*, pp. 481-487.
- 109. E. Barba, L. Procopio, N. Campolungo, T. Pasini, R. Navigli. MuLaN: Multilingual Label propagatioN for Word Sense Disambiguation. Proc. of *IJCAI 2020*, pp. 3837-3844.
- V. Leone, G. Siragusa, L. Di Caro, R. Navigli. Building Semantic Grams of Human Knowledge. Proc. of *LREC 2020*, pp. 2991-3000.
- B. Scarlini, T. Pasini, R. Navigli. Sense-Annotated Corpora for Word Sense Disambiguation in Multiple Languages and Domains. Proc. of *LREC 2020*, pp. 5905-5911.
- R. Tripodi, R. Navigli. Game Theory Meets Embeddings: a Unified Framework for Word Sense Disambiguation. Proc. of *EMNLP/IJCNLP 2019*, pp. 88-99.
- 113. A. Di Fabio, S. Conia, **R. Navigli**. VerbAtlas: a Novel Large-Scale Verbal Semantic Resource and Its Application to Semantic Role Labeling. Proc. of *EMNLP/IJCNLP 2019*, pp. 627-637.
- 114. M. Maru, F. Scozzafava, F. Martelli, R. Navigli. SyntagNet: Challenging Supervised Word Sense Disambiguation with Lexical-Semantic Combinations. Proc. of *EMNLP/IJCNLP 2019*, pp. 3532-3538.
- M. Bevilacqua, R. Navigli. Quasi Bidirectional Encoder Representations from Transformers for Word Sense Disambiguation. Proc. of *RANLP 2019*, pp. 122-131.
- 116. B. Scarlini, T. Pasini, **R. Navigli**. Just "OneSeC" for Producing Multilingual Sense-Annotated Data. Proc. of ACL 2019, pp. 699-709.
- 117. I. Iacobacci, R. Navigli. LSTMEmbed: Learning Word and Sense Representations from a Large Semantically Annotated Corpus with Long Short-Term Memories. Proc. of ACL 2019, pp. 1685-1695.
- T. Pasini, R. Navigli. Two Knowledge-based Methods for High-Performance Sense Distribution Learning. Proc. of AAAI Conference on Artificial Intelligence (AAAI 2018), pp. 5374-5381.
- 119. R. Navigli. Natural Language Understanding: Instructions for (Present and Future) Use. Proc. of the International Joint Conference on Artificial Intelligence (IJCAI 2018), pp. 5697-5702
- 120. T. Pasini, F. Elia, **R. Navigli**. Huge Automatically Extracted Training-Sets for Multilingual Word Sense Disambiguation. Proc. of Language Resources and Evaluation Conferences (LREC 2018).

- 121. J. Camacho-Collados, C. Delli Bovi, L. Espinosa Anke, S. Oramas, T. Pasini, E. Santus, V. Shwartz, R. Navigli, H. Saggion: SemEval-2018 Task 9: Hypernym Discovery. Proc. of *SemEval 2018*, pp. 712-724
- 122. V. Basile, R. Navigli: From MultiJEDI to MOUSSE: Two ERC Projects for Innovating Multilingual Disambiguation and Semantic Parsing of Text. Proc. of World Wide Web Conference (WWW 2018), pp. 441-442
- 123. C. Delli Bovi, J. Camacho-Collados, A. Raganato, R. Navigli: EuroSense: Automatic Harvesting of Multilingual Sense Annotations from Parallel Text. Proc. of the Annual Meeting of the Association for Computational Linguistics (ACL 2017), pp. 594-600
- 124. M. T. Pilehvar, J. Camacho-Collados, R. Navigli, N. Collier: Towards a Seamless Integration of Word Senses into Downstream NLP Applications. Proc. of Annual Meeting of the Association for Computational Linguistics (ACL 2017), pp. 1857-1869
- 125. M. Mancini, J. Camacho-Collados, I. Iacobacci, R. Navigli: Embedding Words and Senses Together via Joint Knowledge-Enhanced Training. Proc. of CoNLL 2017, pp. 100-111
- 126. R. Navigli, J. Camacho-Collados, A. Raganato: Word Sense Disambiguation: A Unified Evaluation Framework and Empirical Comparison. Proc. of European Chapter of the Association for Computational Linguistics (EACL 2017), pp. 99-110
- 127. R. Navigli, J. Camacho-Collados: BabelDomains: Large-Scale Domain Labeling of Lexical Resources. Proc. of European Chapter of the Association for Computational Linguistics (EACL 2017), pp. 223-228
- 128. T. Pasini, R. Navigli: Train-O-Matic: Large-Scale Supervised Word Sense Disambiguation in Multiple Languages without Manual Training Data. Proc. of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP 2017), pp. 78-88
- 129. A. Raganato, C. Delli Bovi, R. Navigli. Neural Sequence Learning Models for Word Sense Disambiguation. Proc. of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP 2017), pp. 1156-1167
- J. Camacho-Collados, M. T. Pilehvar, N. Collier, R. Navigli. SemEval-2017 Task 2: Multilingual and Cross-lingual Semantic Word Similarity. Proc. of SemEval 2017, pp. 15-26
- 131. I. Iacobacci, M. T. Pilehvar, R. Navigli. Embeddings for Word Sense Disambiguation: An Evaluation Study. Proc. of the 54th International Joint Conference on Artificial Intelligence (ACL 2016), Berlin, Germany, 7-12 August, 2016, pp. 897-907.
- 132. A. Raganato, C. Delli Bovi and R. Navigli. Automatic Construction and Evaluation of a Large Semantically Enriched Wikipedia. Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016), New York, USA, July 9-15, 2016, pp. 2894-2900.
- 133. L. Espinosa, H. Saggion, F. Ronzano and R. Navigli. ExTaSem! Extending, Taxonomizing and Semantifying Domain Terminologies. Proc. of the 30th AAAI Conference on Artificial Intelligence (AAAI 2016), Phoenix, Arizona USA, February 12-17, 2016, pp. 25942600.
- 134. J. Camacho-Collados, C. Delli Bovi, A. Raganato, R. Navigli. A Large-Scale Multilingual Disambiguation of Glosses. Proc. of the 10th Language Resources and Evaluation Conference (LREC 2016), Portoroz, Slovenia, 23-28 May, 2016, pp. 1701-1708.
- 135. C. Delli Bovi, L. Espinosa-Anke and R. Navigli. Knowledge Base Unification via Sense Embeddings and Disambiguation. Proc. of the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP 2015), Lisbon, Portugal, 17-21 September 2015, pp. 726-736
- 136. I. Iacobacci, M. T. Pilehvar and R. Navigli. SensEmbed: Learning Sense Embeddings for Word and Relational Similarity. Proc. of the 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015), Beijing, China, 26-31 July 2015, pp. 95-105.
- 137. J. Camacho-Collados, M. T. Pilehvar and R. Navigli. A Unified Multilingual Semantic Representation of Concepts. Proc. of the 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015), Beijing, China, 26-31 July 2015, pp. 741-751.

- 138. J. Camacho-Collados, M. T. Pilehvar and R. Navigli. A Framework for the Construction of Monolingual and Cross-lingual Semantic Similarity Datasets. Proc. of the 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015), Beijing, China, 26-31 July 2015, pp. 1-7.
- 139. R. Usbeck, M. Röder, A. Ngonga Ngomo, C. Baron, A. Both, M. Brümmer, D. Ceccarelli, M. Cornolti, D. Cherix, B. Eickmann, P. Ferragina, C. Lemke, A. Moro, R. Navigli, F. Piccinno, G. Rizzo, H. Sack, R. Speck, R. Troncy, J. Waitelonis and L. Wesemann. GERBIL General Entity Annotation Benchmark Framework. Proc. of the 24th International World Wide Web Conference (WWW 2015), Firenze, Italy, 18-22 May 2015, pp. 1133-1143.
- 140. J. Camacho-Collados, M. T. Pilehvar and R. Navigli. NASARI: a Novel Approach to a Semantically-Aware Representation of Items. Proc. of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2015), Denver, Colorado (US), 31 May-5 June 2015, pp. 567-577.
- 141. M. T. Pilehvar and R. Navigli. An Open-source Framework for Multi-level Semantic Similarity Measurement. Proc. of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Demonstrations (NAACL 2015), Denver, Colorado (US), 31 May-5 June 2015, pp. 76-80.
- 142. S. Necsulescu, S. Mendes, D. Jurgens, N. Bel and R. Navigli. Reading Between the Lines: Overcoming Data Sparsity for Accurate Classification of Lexical Relationships. Proc. of the 4th Joint Conference on Lexical and Computational Semantics (*SEM 2015), Denver, Colorado (US), 4-5 June 2015, pp. 182-192.
- 143. A. Moro, F. Cecconi, R. Navigli. Multilingual Word Sense Disambiguation and Entity Linking for Everybody. Proc. of the 13th International Semantic Web Conference, Posters and Demonstrations (ISWC 2014), pp. 25-28, Riva del Garda, Italy, 19-23 October 2014.
- 144. T. Flati, R. Navigli. The Wikipedia Bitaxonomy Explorer. Proc. of the 13th International Semantic Web Conference, Posters and Demonstrations (ISWC 2014), pp. 105-108, Riva del Garda, Italy, 19-23 October 2014.
- 145. T. Flati, D. Vannella, T. Pasini, R. Navigli. Two Is Bigger (and Better) Than One: the Wikipedia Bitaxonomy Project. Proc. of the 52nd Annual Meeting of the Association for Computational Linguistics (ACL 2014), Baltimore, USA, June 22-27, 2014, pp. 945-955.
- 146. M. T. Pilehvar and R. Navigli. A Robust Approach to Aligning Heterogeneous Lexical Resources. Proc. of the 52nd Annual Meeting of the Association for Computational Linguistics (ACL 2014), Baltimore, USA, June 22-27, 2014, pp. 468-478.
- 147. D. Vannella, D. Jurgens, D. Scarfini, D. Toscani, R. Navigli. Validating and Extending Semantic Knowledge Bases using Video Games with a Purpose. Proc. of the 52nd Annual Meeting of the Association for Computational Linguistics (ACL 2014), Baltimore, USA, June 22-27, 2014, pp. 1294-1304.
- 148. D. Vannella, T. Flati, R. Navigli. WoSIT: A Word Sense Induction Toolkit for Search Result Clustering and Diversification. Proc. of the 52nd Annual Meeting of the Association for Computational Linguistics, System Demonstrations (ACL 2014), Baltimore, USA, June 22-27, 2014, pp. 67-72.
- 149. M. Ehrmann, F. Cecconi, D. Vannella, J. McCrae, P. Cimiano, R. Navigli. Representing Multilingual Data as Linked Data: the Case of BabelNet 2.0. Proc. of the 9th Language Resources and Evaluation Conference (LREC 2014), Reykjavik, Iceland, 26-31 May, 2014, pp. 401-408.
- 150. A. Moro, R. Navigli, F. M. Tucci, R. J. Passonneau. Annotating the MASC Corpus with BabelNet. Proc. of the 9th Language Resources and Evaluation Conference (LREC 2014), Reykjavik, Iceland, 26-31 May, 2014, pp. 4214-4219.
- 151. M. Franco-Salvador, P. Rosso, R. Navigli. A Knowledge-based Representation for Cross-Language Document Retrieval and Categorization. Proc. of 14th Conference of the European Association for Computational Linguistics (EACL 2014), Gothenburg, Sweden, April 26-30, 2014, pp. 414-423.

- 152. T. Flati, R. Navigli. Three birds (in the LLOD cloud) with one stone: BabelNet, Babelfy and the Wikipedia Bitaxonomy. Proc. of SEMANTICS 2014, Leipzig, Germany, September 4-5, 2014, pp. 10-13. Best poster award
- 153. S. Faralli and R. Navigli. Growing Multi-Domain Glossaries from a Few Seeds with Probabilistic Topic Models. Proc. of the 2013 Conference on Empirical Methods in Natural Language Processing (EMNLP 2013), Seattle, USA, October 18-21, 2013, pp. 170-181.
- 154. A. Moro, H. Li, S. Krause, F. Xu, R. Navigli, H. Uszkoreit. Semantic Rule Filtering for Web-Scale Relation Extraction. Proc. of the 12th International Semantic Web Conference (ISWC 2013), Sydney, Australia, October 21-25, 2013, pp. 347-362.
- 155. T. Flati, R. Navigli. SPred: Large-scale Harvesting of Semantic Predicates. Proc. of the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013), Sofia, Bulgaria, August 4-9, 2013, pp. 1222-1232.
- 156. F. De Benedictis, S. Faralli, R. Navigli. GlossBoot: Bootstrapping Multilingual Domain Glossaries from the Web. Proc. of the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013), Sofia, Bulgaria, August 4-9, 2013, pp. 528-538.
- 157. M. T. Pilehvar, D. A. Jurgens, **R. Navigli**. Align, Disambiguate and Walk: A Unified Approach for Measuring Semantic Similarity. Proc. of the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013), Sofia, Bulgaria, August 4-9, 2013, pp. 1341-1351. Best paper award nominee.
- 158. S. Faralli, R. Navigli. A Java Framework for Multilingual Definition and Hypernym Extraction. Proc. of the 51st Annual Meeting of the Association for Computational Linguistics, System Demonstrations (ACL 2013), Sofia, Bulgaria, August 4-9, 2013, pp. 103-108.
- 159. A. Moro and R. Navigli. Integrating Syntactic and Semantic Analysis into the Open Information Extraction Paradigm. Proc. of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013), Beijing, China, August, 3-9th, 2013, pp. 2148-2154.
- 160. T. Flati and R. Navigli. The CQC Algorithm: Cycling in Graphs to Semantically Enrich and Enhance a Bilingual Dictionary: Extended abstract. Proc. of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013), Beijing, China, August, 3-9th, 2013, pp. 3151-3155.
- 161. M. T. Pilehvar and R. Navigli. Paving the Way to a Large-scale Pseudosense-annotated Dataset. Proc. of the 2013 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT 2013), Atlanta, USA, June 10-12, 2013, pp. 1100-1109.
- R. Navigli. A Quick Tour of BabelNet 1.1. Proc. of the 14th International Conference on Intelligent Text Processing and Computational Linguistics (CICLing 2013), Samos, Greece, March 24-30th, 2013, pp. 25-37.
- 163. A. Moro and R. Navigli. WiSeNet: Building a Wikipedia-based Semantic Network with Ontologized Relations. Proc. of the 21th ACM Conference on Information and Knowledge Management (CIKM 2012), Maui Hawaii, October 29-November 2, 2012, pp. 1672-1676.
- 164. S. Faralli and R. Navigli. A New Minimally-Supervised Framework for Domain Word Sense Disambiguation. Proc. of the 2012 Conference on Empirical Methods in Natural Language Processing (EMNLP 2012), Jeju, Korea, July 12-14, 2012, pp. 1411-1422.
- 165. R. Navigli and S. Ponzetto. Joining Forces Pays Off: Multilingual Joint Word Sense Disambiguation. Proc. of the 2012 Conference on Empirical Methods in Natural Language Processing (EMNLP 2012), Jeju, Korea, July 12-14, 2012, pp. 1399-1410.
- 166. R. Navigli and S. Ponzetto. BabelRelate! A Joint Multilingual Approach to Computing Semantic Relatedness. Proc. of the 26th AAAI Conference on Artificial Intelligence (AAAI 2012), Toronto, Canada, July 22-26, 2012, pp. 108-114.

- 167. R. Navigli and S. Ponzetto. Multilingual WSD with Just a Few Lines of Code: the BabelNet API. Proc. of the 50th Annual Meeting of the Association for Computational Linguistics (ACL 2012), Jeju, Korea, July 9-11, 2012, pp. 67-72.
- 168. R. Navigli, S. Ponzetto. BabelNetXplorer: A Platform for Multilingual Lexical Knowledge Base Access and Exploration. Proc. of the 21st International World Wide Web Conference (WWW 2012), Lyon, France, April 16-20th, 2012.
- 169. R. Navigli. A Quick Tour of Word Sense Disambiguation, Induction and Related Approaches. Proc. of the 38th Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2012), Spindleruv Mlyn, Czech Republic, January 21-27th, 2012, pp. 115-129.
- 170. P. Velardi, R. Navigli, S. Faralli and J. M. Ruiz-Martínez. A New Method for Evaluating Automatically Learned Terminological Taxonomies. Proceedings of the 8th Conference on International Language Resources and Evaluation (LREC 2012), Istanbul, Turkey, May 21-27, 2012, pp. 1498-1504.
- 171. R. Navigli, P. Velardi, S. Faralli. A Graph-based Algorithm for Inducing Lexical Taxonomies from Scratch, Proc. of 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011), Barcelona, Spain, July 19 – 22nd, 2011, pp. 1872-1877.
- 172. R. Navigli, S. Faralli, A. Soroa, O. Lopez De Lacalle, E. Agirre. Two Birds with One Stone: Learning Semantic Models for Text Categorization and Word Sense Disambiguation. Proc. of the 20th ACM Conference on Information and Knowledge Management (CIKM 2011), Glasgow, UK, October 24-28th, 2011, pp. 2317-2320.
- 173. A. Di Marco, R. Navigli. Clustering Web Search Results with Maximum Spanning Trees. Proc. of the XIIth International Conference of the Italian Association for Artificial Intelligence (AI*IA 2012), Palermo, Italy, September 15-17, 2011, pp. 201-212.
- 174. R. Navigli, G. Crisafulli. Inducing Word Senses to Improve Web Search Results Clustering, Proc. of the 2010 Empirical Methods in Natural Language Processing (EMNLP 2010), MIT, Massachusetts, USA, October 9 – 11th, 2010, pp. 116-126.
- 175. R. Navigli, P. Velardi. Learning Word-Class Lattices for Definition and Hypernym Extraction, Proc. of 48th Conference of the Association for Computational Linguistics (ACL 2010), Uppsala, Sweden, July 12 – 14th, 2010, pp. 1318-1327.
- 176. S. Ponzetto, R. Navigli. Knowledge-rich Word Sense Disambiguation Rivaling Supervised Systems, Proc. of 48th Conference of the Association for Computational Linguistics (ACL 2010), Uppsala, Sweden, July 12 – 14th, 2010, pp. 1522-1531.
- 177. R. Navigli, S. Ponzetto. BabelNet: Building a Very Large Multilingual Semantic Network, Proc. of 48th Conference of the Association for Computational Linguistics (ACL 2010), Uppsala, Sweden, July 12 - 14th, 2010, pp. 216-225.
- 178. R. Navigli, P. Velardi, J. M. Ruiz-Martínez. An Annotated Dataset for Extracting Definitions and Hypernyms from the Web, Proc. of the 7th Language Resources and Evaluation Conference (LREC 2010), Valletta, Malta, May 17 – 23rd, 2010, pp. 3716–3722.
- 179. D. McCarthy, B. Keller, R. Navigli. Getting Synonym Candidates from Raw Data in the English Lexical Substitution Task. Proc. of the 14th EURALEX International Congress, Leeuwarden, The Netherlands, July 6 - 10th, 2010.
- 180. S. Ponzetto, R. Navigli. Large-Scale Taxonomy Mapping for Restructuring and Integrating Wikipedia, Proc. of 21st International Joint Conference on Artificial Intelligence (IJCAI 2009), Pasadena, California, July 14 – 17th, 2009, pp. 2083-2088.
- 181. R. Navigli. Using Cycles and Quasi-Cycles to Disambiguate Dictionary Glosses, Proc. of 12th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2009), Athens, Greece, March 30th-April 3rd, 2009, pp. 594-602.

- 182. P. Velardi, R. Navigli, A. Cucchiarelli, F. D'Antonio. A New Content-Based Model for Social Network Analysis, Proc. of 2nd IEEE International Conference on Semantic Computing (ICSC), Santa Clara, CA, USA, August 4 - 7th, 2008, pp. 18-25.
- 183. P. Velardi, R. Navigli, A. Cucchiarelli, M. Curzi. Content-Based Social Network Analysis, Proc. of 18th European Conference on Artificial Intelligence (ECAI), Patras, Greece, July 21 – 25th, 2008, pp. 765-766.
- 184. R. Navigli, P. Velardi. GlossExtractor: a Web Application to Automatically Create a Domain Glossary, Proc. of 10th Congress of the Italian Association for Artificial Intelligence (AI*IA 2007), Roma, Italy, September 10 – 13th, 2007, pp. 339-349.
- 185. R. Navigli, M. Lapata. Graph Connectivity Measures for Unsupervised Word Sense Disambiguation, Proc. of 20th International Joint Conference on Artificial Intelligence (IJCAI 2007), Hyderabad, India, January 6 – 12th, 2007, pp. 1683-1688.
- 186. P. Velardi, R. Navigli, M. Petit. Semantic Indexing of a Competence Map to support Scientific Collaboration in a Research Community, Proc. of 20th International Joint Conference on Artificial Intelligence (IJCAI 2007), Hyderabad, India, January 6 – 12th, 2007, pp. 2897-2902.
- 187. R. Navigli, P. Velardi. Ontology Enrichment Through Automatic Semantic Annotation of On-line Glossaries, Proc. of 15th International Conference on Knowledge Engineering and Knowledge Management (EKAW), LNAI no. 4248, Podebrady, Czech Republic, October 2nd - 6th, 2006, pp. 126-140.
- 188. R. Navigli. Meaningful Clustering of Senses Helps Boost Word Sense Disambiguation Performance, Proc. of 44th Conference of the Association for Computational Linguistics (ACL 2006), Sydney, Australia, July 17 – 21st, 2006, pp. 105-112.
- 189. S. Brody, R. Navigli, M. Lapata. Ensemble Methods for Unsupervised WSD, Proc. of 44th Conference of the Association for Computational Linguistics (ACL 2006), Sydney, Australia, July 17-21st, 2006, pp. 97-104.
- 190. R. Navigli. Valido: a Visual Tool for Validating Sense Annotations, Proc. of 44th Conference of the Association for Computational Linguistics (ACL 2006), Sydney, Australia, July 17-21st, 2006, pp. 13-16.
- 191. R. Navigli. Reducing the Granularity of a Computational Lexicon via an Automatic Mapping to a Coarse-Grained Sense Inventory, Proc. of 5th International Conference on Language Resources and Evaluation (LREC 2006), Genova, Italy, May 22 – 26th, 2006, pp. 841-844.
- 192. R. Navigli. Experiments on the Validation of Sense Annotations Assisted by Lexical Chains, Proc. of 11th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2006), Trento, Italy, April 5 – 7th, 2006, pp. 129-136.
- 193. R. Navigli. Online Word Sense Disambiguation with Structural Semantic Interconnections, Proc. 11th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2006), companion volume, Trento, Italy, April 5 – 7th, 2006, pp. 107-110.
- 194. A. De Nicola, R. Navigli, M. Missikoff. Building an eProcurement Ontology with UPON methodology. In Proc. of 15th e-Challenges Conference, IOS Press, Lijubiana, Slovenia, October 19 - 21st, 2005.
- 195. A. De Nicola, M. Missikoff, R. Navigli. A proposal for a Unified Process for ONtology building: UPON. In Proc. of 16th International Conference on Database and Expert Systems Applications (DEXA), Springer, LNCS no. 3588, Springer Berlin, Copenhagen, Denmark, August 22 – 26th, 2005, pp. 655-664.
- 196. M. Missikoff, **R. Navigli**. Applying the Unified Process to Large-Scale Ontology Building, In Proc. of  $16^{th}$  *IFAC World Congress*, Praha, Czech Republic, July  $4 8^{th}$ , 2005.
- 197. **R. Navigli**, P. Velardi. Automatic Acquisition of a Thesaurus of Interoperability Terms, In Proc. of  $16^{th}$  *IFAC World Congress*, Praha, Czech Republic, July  $4 8^{th}$ , 2005.

- 198. R. Navigli. Semi-Automatic Extension of Large-Scale Linguistic Knowledge Bases, Proc. of 18th International FLAIRS (Florida Artificial Intelligence Research Society) Conference, AAAI Press, Clearwater Beach, Florida, May 16 – 18th, 2005, pp. 548-553.
- 199. R. Navigli, P. Velardi, A. Cucchiarelli, F. Neri. Quantitative and Qualitative Evaluation of the OntoLearn Ontology Learning System, Proc. of 20th International Conference on Computational Linguistics (COLING 2004), Geneva, Switzerland, August 23 – 27th, 2004, pp. 1043-1050.
- 200. L. Cinque, A. Malizia, R. Navigli. OntoDoc: an Ontology-based Query System for Digital Libraries, Proc. of 17th International Conference on Pattern Recognition (ICPR 2004), Cambridge, UK, August 23 – 26th, 2004, vol.2, pp. 671-674.
- 201. A. Cucchiarelli, R. Navigli, F. Neri, P. Velardi. Automatic Generation of Glosses in the OntoLearn System, Proc. 4th International Conference on Language Resources and Evaluation (LREC 2004), Lisboa, Portugal, May 26 - 28th, 2004, pp. 1293-1296.
- 202. R. Navigli, P. Velardi, A. Cucchiarelli, F. Neri. Extending and Enriching WordNet with OntoLearn, Proc. 2nd Global Wordnet Conference 2004 (GWC 2004), Brno, Czech Republic, January 20 – 23rd, 2004, pp. 279-284.
- 203. A. Gangemi, R. Navigli, P. Velardi. The OntoWordNet Project: Extension and Axiomatization of Conceptual Relations in WordNet, Proc. 2nd International Conference on Ontologies, Databases and Applications of SEmantics (ODBASE 2003), LNCS no. 2888, Springer Berlin / Heidelberg, Catania, Italy, November 3 – 7th, 2003, pp. 820-838.
- 204. R. Navigli. Automatically Extending, Reducing and Trimming General-Purpose Ontologies, Proc. 2nd IEEE International Conference on Systems, Man and Cybernetics (SMC 2002), Tunisy, October 6 - 9th, 2002, pp. 631-635.
- 205. R. Navigli, P. Velardi. Semantic Interpretation of Terminological Strings, Proc. 6th International Conference on Terminology and Knowledge Engineering (TKE 2002), Vandoeuvre-lès-Nancy, France, August 28 – 30th, 2002, pp. 95-100.
- 206. M. Missikoff, R. Navigli, P. Velardi. The Usable Ontology: An Environment for Building and Assessing a Domain Ontology, Proc. 1st International Semantic Web Conference (ISWC 2002), LNCS no. 2342, Springer-Verlag, Berlin, 2002, pp. 39-53.
- 207. R. Navigli, P. Velardi. Automatic Adaptation of WordNet to Domains, Proc. 3rd International Conference on Language Resources and Evaluation (LREC 2002), Las Palmas, Canary Island, Spain, May 29 – 31st, 2002, pp. 1023-1027.

#### Papers presented at International Workshops (Refereed)

- 208. J. Camacho Collados, R. Navigli. Find the word that does not belong: A Framework for an Intrinsic Evaluation of Word Vector Representations. Proc. of the First Workshop on Evaluating Vector Space Representations for NLP (RepEval), in the the 54th Annual Meeting of the Association for Computational Linguistics (ACL 2016), Berlin, Germany, 12 August, 2016, pp. 43-50.
- 209. J. P. McCrae, P. Cimiano, V. Rodriguez-Doncel, D. Vila Suero, J. Gracia, L. Matteis, R. Navigli, A. Abele, G. Vulcu and P. Buitelaar. Reconciling Heterogeneous Descriptions of Language Resources. Proceedings of the 4th Workshop on Linked Data in Linguistics (LDL), in the the 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015), Beijing, China, July 31st, 2015, pp. 39-48.
- 210. A. Moro, R. Navigli. SemEval-2015 Task 13: Multilingual All-Words Sense Disambiguation and Entity Linking. Proc. of the 9th International Workshop on Semantic Evaluation (SemEval), in the the 2015 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2015), Denver, Colorado, June 4-5th, 2015, pp. 288-297.
- 211. G. Bordea, P. Buitelaar, S. Faralli, R. Navigli. SemEval-2015 Task 17: Taxonomy Extraction Evaluation (TExEval). Proc. of the 9th International Workshop on Semantic Evaluation (SemEval), in the the 2015 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2015), Denver, Colorado, June 4-5th, 2015, pp. 902-910. DATA

- 212. L. Matteis, A. Hogan, R. Navigli. Keyword-Based Navigation and Search over the Linked Data Web. Proc. of the *Linked Data on the Web Workshop (LDOW 2015)*, in the the 24th International World Wide Web Conference (WWW 2015), Firenze, Italy, May 19, 2015, pp. 288-297.
- 213. P. Bottoni, R. Navigli, F. Parisi-Presicce: Conditions, Constraints and Contracts: On the Use of Annotations for Policy Modeling. Proc. of the 6th International Workshop on Graph Computation Models co-located with the 8th International Conference on Graph Transformation (ICGT 2015) L'Aquila, Italy, July 20, 2015, pp. 18-33.
- 214. R. Navigli. (Digital) Goodies from the ERC Wishing Well: BabelNet, Babelfy, Video Games with a Purpose and the Wikipedia Bitaxonomy. Proc. of the 2nd International Workshop on NLP & DBpedia 2014, Riva del Garda, Italy, October 20, 2014.
- 215. D. Jurgens, M. T. Pilehvar, R. Navigli. SemEval-2014 Task 3: Cross-Level Semantic Similarity, Proc. of the 8th International Workshop on Semantic Evaluation (SemEval), colocated with COLING 2014, Dublin, Ireland, August 23-24th, 2014, pp. 17-26.
- 216. R. Navigli, D. Vannella. SemEval-2013 Task 11: Word Sense Induction & Disambiguation within an End-User Applications, Proc. of the 7th International Workshop on Semantic Evaluation (SemEval), in the Second Joint Conference on Lexical and Computational Semantcis (*SEM 2013), Atlanta, USA, June 14-15th, 2013, pp. 193-201.
- 217. R. Navigli, D. A. Jurgens, D. Vannella. Task 12: Multilingual Word Sense Disambiguation, Proc. of the 7th International Workshop on Semantic Evaluation (SemEval), in the Second Joint Conference on Lexical and Computational Semantcis (*SEM 2013), Atlanta, USA, June 14-15th, 2013, pp. 222-231.
- 218. R. Navigli, K. Litkowski, O. Hargraves. SemEval-2007 Task 07: Coarse-Grained English All-Words Task, Proc. of Semeval-2007 Workshop (SEMEVAL), in the 45th Annual Meeting of the Association for Computational Linguistics (ACL 2007), Prague, Czech Republic, June 23-24th, 2007, pp. 30-35.
- 219. D. McCarthy, R. Navigli. SemEval-2007 Task 10: English Lexical Substitution Task, Proc. of Semeval-2007 Workshop (SEMEVAL), in the 45th Annual Meeting of the Association for Computational Linguistics (ACL 2007), Prague, Czech Republic, June 23 24th, 2007, pp. 48-53.
- 220. R. Navigli, P. Velardi. Enriching a Formal Ontology with a Thesaurus: an Application in the Cultural Heritage Domain, Proc. of 2nd Workshop on Ontology Learning and Population (OLP), in the 44th Conference of the Association for Computational Linguistics joint with the 21st International Conference on Computational Linguistics (ACL 2006), Sydney, Australia, July 22nd, 2006, pp. 1-9.
- 221. B. Berendt, R. Navigli. Finding your Way through Blogspace: Using Semantics for Cross-Domain Blog Analysis, AAAI Spring Symposium 2006 on Computational Approaches to Analysing Weblogs, AAAI Press, Stanford University, Palo Alto, California, March 27 – 29th, 2006, pp. 1-8.
- 222. R. Navigli. Supporting Large-Scale Knowledge Acquisition with Structural Semantic Interconnections, Proc. of AAAI Spring Symposium 2005 on Knowledge Collection from Volunteer Contributors (KCVC05), AAAI Press, Stanford University, Palo Alto, California, March 21 – 23rd, 2005, pp. 48-55.
- 223. R. Navigli. Semantic Enrichment of Large-Scale Linguistic Resources, Proc. of 2nd MEANING Workshop, Trento, Italy, February 3 – 4th, 2005, pp. 13-18.
- 224. L. Cinque, A. Malizia, R. Navigli. A Semantic-based System for Querying Personal Digital Libraries, Proc. of *IAPR Workshop on Document Analysis Systems (DAS 2004)*, LNCS no. 3163, Springer, Florence, Italy, September 8 – 10th, 2004, pp. 39-46.
- 225. A. Cucchiarelli, R. Navigli, F. Neri, P. Velardi. Automatic Ontology Learning: Supporting a Per-Concept Evaluation by Domain Experts, Proc. of Workshop on Ontology Learning and Population (OLP), in the 16th European Conference on Artificial Intelligence (ECAI), Valencia, Spain, August 22 - 23nd, 2004, pp. 1-6.
- 226. R. Navigli, P. Velardi. Structural Semantic Interconnection: a Knowledge-Based Approach to Word Sense Disambiguation, Proc. of SENSEVAL-3 Workshop on Sense Evaluation, in the 42th Annual Meeting of the Association for Computational Linguistics (ACL 2004), Barcelona, Spain, July 25 - 26th, 2004, pp. 179-182.

- 227. R. Navigli, P. Velardi. A Knowledge-Based Approach to Ontology Learning and Semantic Annotation, Proc. of INTEROP Workshop on Enterprise Modelling and Ontologies for Interoperability (EMOI), in the 16th International Conference on Advanced Information Systems Engineering (CAISE 2004), Riga, Latvia, June 7 – 8th, 2004, pp. 189-203.
- 228. A. Gangemi, R. Navigli, P. Velardi. Axiomatizing WordNet Glosses in the OntoWordNet Project, Proc. Workshop on Human Language Technology for the Semantic Web and Web Services in the 2003 International Semantic Web Conference (ISWC 2003), Sanibel Island, Florida, USA, October 20 - 23rd, 2003.
- 229. R. Navigli, P. Velardi. An Analysis of Ontology-based Query Expansion Strategies, Proc. Workshop on Adaptive Text Extraction and Mining (ATEM 2003) in the 14th European Conference on Machine Learning (ECML 2003), Cavtat-Dubrovnik, Croatia, September 22 – 26th, 2003, pp. 42-49.

#### Articles on Italian Magazines by Invitation

- 230. F. Martelli, R. Navigli. Disambiguare le reti sociali. Gnosis, Rivista Italiana di Intelligence, n. 4/2018.
- 231. T. Grossi, R. Navigli. Quando la macchina comprende ciò che diciamo. Gnosis, Rivista Italiana di Intelligence, n. 2/2017.
- 232. R. Navigli. Machine Reading: quali sfide per la comprensione automatica del linguaggio naturale? Gnosis, Rivista Italiana di Intelligence, n. 2/2016.

Autorizzo espressamente al trattamento dei miei dati personali per le finalità e con le modalità di cui al Regolamento europeo (UE) n. 2016/679 del 27 aprile 2016 e del D. Lgs. 30 giugno 2003, n. 196.