#### PERSONAL INFORMATION

# Pierpaolo Basile



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1 http://www.di.uniba.it/~swap/index.php?n=Membri.Basile

| Nationality Italian

h-index: 23 total citations: 2147 (source: Google Scholar)

h-index: 15 total citations: 988 (source: Scopus)

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level		☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

#### **WORK EXPERIENCE**

Dec. 2021 - Present

# Associate Professor (ING-INF/05 - Information Processing Systems)

University of Bari Aldo Moro, Department of Computer Science, Italy

Research topics: natural language processing, information retrieval, recommender systems Research

Dec. 2018 - Dec. 2021

## Assistant Professor – RTD-B (ING-INF/05 - Information Processing Systems)

University of Bari Aldo Moro, Department of Computer Science, Italy

Research topics: natural language processing, information retrieval, recommender systems Research

Jun. 2016 - Dec. 2018

### Assistant Professor – RTD-A (INF/01 - Computer Science)

University of Bari Aldo Moro, Department of Computer Science, Italy

 Research topics: natural language processing, multilingual entity linking Research

Jul. 2013 - Jul. 2016

# Research Fellow (Post-Doc Researcher)

University of Bari Aldo Moro, Department of Computer Science, Italy

Research topics: natural language processing, compositional operators in distributional semantic models

Research

Jun. 2009 – Jun. 2013

# Research Fellow (Post-Doc Researcher)

University of Bari Aldo Moro, Department of Computer Science, Italy

Research topics: natural language processing, semantic indexing, information retrieval

Research

## **EDUCATION AND TRAINING**

#### 2009 Ph.D in Computer Science

University of Bari Aldo Moro, Italy

Word Sense Disambiguation and Intelligent Information Access

2005 M.Sc. in Computer Science

University of Bari Aldo Moro, Italy

JIGSAW: an algorithm for Word Sense Disambiguation, 108/110

**PROJECTS** (last five years)

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Sep. 2017 - Sep. 2018 Research contract between the Digital Transformation Team and the Department of Computer Science, University of Bari Aldo Moro. (project leader)

Jun. 2016 - Dec. 2018 Future in Research - project: "Multilingual Entity Linking" (cod. IAVIN27) funded by the Apulia Region (project leader)

## **Project reviewer**

Hasler Foundation, PRIN 2017, Israel Science Foundation

### **COMMUNITY SERVICE (last 5y)**

Program co-chair IEEE International Conference on Humanized Computing and Communication with Artificial Intelligence (HCCAI 2020)

Workshops co-chair 3rd, 2nd, 1st Knowledge-aware and Conversational Recommender Systems Workshop (KaRS 2021, KaRS

2019, KaRS 2018), 4th, 2nd, 1st Workshop on Natural Language for Artificial Intelligence (NL4AI 2020, NL4AI 2018, NL4AI 2017), 1st Workshop on Temporal Dynamics in Digital Libraries (TDDL 2017), co-located

at TPDL 2017

Sponsor chair 6th Italian Conference on Computational Linguistics (CLiC-it 2019)

TPC member

ACL Rolling Review; ACL 2018-2020; EMNLP 2017, 2018, 2020, 2021; EACL 2021; RecSys 2021-2019; COLING 2020, 2022; SAC 2019-2021; ECAI 2020; ESWC 2017-2021, ISWC 2017-2021; NLDB 2017-2020;

CIKM 2020-2021; IJCAI 2021, 2019; AAAI 2020

Regular reviewer Italian Journal of Computational Linguistics (IJCoL), Language Resources and Evaluation, Journal of

Information Processing and Management, Semantic Web Journal, Data Mining and Knowledge Discovery,

Journal of Transactions on Games, Progress in Artificial Intelligence, Al Communications

Tutorial Lexical Semantic Change: Models, Data and Evaluation - LREC 2022

Linked Open Data for Semantics-aware Recommender Systems - ESWC 2017

Association board Association board of AILC – Italian Association of Computational Linguistics (2019-2021)

#### **EDITORIAL ACTIVITY**

2020 - 2021 Co-editor: Special Issue "Knowledge Graphs for Search and Recommendation". Information (ISSN 2078-

2489).

#### PHD SUPERVISION

2021 - Present PhD co-tutor at University of Bari: Pierluigi Cassotti. Computational Approaches for Lexical Semantic

Change Detection. PhD program in Computer Science and Mathematics, XXXVI Cycle.

2017 - 2020 PhD co-tutor at University of Bari: Lucia Siciliani. Conversational agents for recommender systems. PhD

program in Computer Science and Mathematics, XXXIII Cycle.

#### **TEACHING**

2021 - 2022 "Deep Learning for Natural Language Processing", PhD Programme in Computer Science and

Mathematics, University of Bari, Italy.

2021 - 2022 "Videogame development", Bachelor Program in Computer Science, University of Bari, Italy.

2019-2020, 2020-2021, 2021-"Advanced Programming Methods", Bachelor Program in Computer Science, University of Bari, Italy.

2022

2019-2020 "Advanced Natural Language Processing", PhD Programme in Computer Science and Mathematics,

University of Bari, Italy.

2018-2019 "Algorithms and Data Structures", Bachelor Program in Computer Science, University of Bari, Italy.

2017-2018, 2016-2017 "Information Retrieval", Bachelor Program in Computer Science, University of Bari, Italy.

> 2016-2017 "Geometry and Meaning", PhD Programme in Computer Science and Mathematics, University of Bari, Italy.

INSTITUTIONAL RESPONSIBILITIES	
2021 - Present	Academic Board of the PhD Programme in Computer Science and Mathematics (XXXVII cycle), University of Bari, Italy.
2017 - 2020	Coordinator of the Admissions Tests of the Bachelor Program in Computer Science, University of Bari, Italy.
INVITED TALKS	
2022	"Al e Recommender System" – Meeting associazione AlxIA e TELT
2017	"Question Answering for a Language Game and Customer Support" - MOD 2017 - The Third International Conference on Machine Learning, Optimization and Big Data.
2016	Panelist: "Language Technologies at the crossroad of industrial, social and cultural innovation dynamics", Third Italian Conference on Computational Linguistics (CLIC-it 2016).
FELLOWSHIPS AND AWARDS	
2018	Alan Turing Institute - Visiting Researcher Application - The project titled "Diachronic Analysis of Language" has been accepted as visiting research project at the Alan Turing Institute.
2015	Future in Research - Author of the project "Multilingual Entity Linking" (cod. IAVIN27) funded by the Apulia Region (Future In Research program) for the funding of 170 fixed-term research positions in the Apulia universities.
2014	Linked Open Data-Enabled Recommender System Challenge - ESWC 2014 first system in the Top-N recommendation from binary user feedback task.
2014	CLiC-it 2014 Best Young Paper Award "Analysing Word Mining over Time by Exploiting Temporal Random Indexing" assigned by the First Italian Conference on Computational Linguistics (CLiC-it 2014).
2009	Grant awarded for attending the IJCAI 2009 - 21st International Joint Conference on Artificial Intelligence, Pasadena, California, USA.
2009	Distinguished Ph.D. theses 2009-2010 assigned by the Special Interest Group on Natural Language Processing of the Italian Association for Artificial Intelligence.
ADDITIONAL INFORMATION	
2018	ASN II Fascia – settore 01/B1
2017	ASN II Fascia – settore 09/H1
PUBLICATIONS	

Publications best and most relevant in the last 10 years

- Siciliani, Lucia, Basile, Pierpaolo, Lops, Pasquale, Semeraro, Giovanni. MQALD: Evaluating the impact of modifiers in question answering over knowledge graphs. SEMANTIC WEB, 13 (2), p. 215 – 231, 2022. DOI: 10.3233/SW-210440
- Tsakalidis, Adam, Basile, Pierpaolo, Bazzi, Marya, Cucuringu, Mihai, McGillivray, Barbara. DUKweb, diachronic word representations from the UK Web Archive corpus. SCIENTIFIC DATA, 8 (1), art. no. 269, 2021. DOI: 10.1038/s41597-021-01047-x
- 3. Florio, Komal, Basile, Valerio, Polignano, Marco, Basile, Pierpaolo, Patti, Viviana. Time of your hate: The challenge of time in hate speech detection on social media. APPLIED SCIENCE, 10 (12), art. no. 4180, 2020. DOI: 10.3390/APP10124180
- Narducci, Fedelucio, Basile, Pierpaolo, de Gemmis, Marco, Lops, Pasquale, Semeraro, Giovanni. An investigation on the user interaction modes of conversational recommender systems for the music domain. USER MODELING AND USER-ADAPTED INTERACTION, vol. 30, p. 251-284, 2020. DOI: 10.1007/s11257-019-09250-7.
- Cassotti, Pierluigi, Basile, Pierpaolo, de Gemmis, Marco, Semeraro, Giovanni. Analyzing Gaussian distribution of semantic shifts in Lexical Semantic Change Models. IJCoL. Italian Journal of Computational Linguistics 6 (6-2), 23-36, 2020. DOI: https://doi.org/10.4000/ijcol.714
- Rossiello, Gaetano, Caputo, Annalina, Basile, Basile, Semeraro, Giovanni. Modeling concepts and their relationships for corpus-based query auto-completion. OPEN COMPUTER SCIENCE 9(1): 212-225, 2019. DOI: 10.1515/comp-2019-0015
- Basile, Pierpaolo, Greco, Claudio, Suglia, Alessandro, Semeraro, Giovanni: Bridging the gap between linked open data-based recommender systems and distributed representations. INFORMATION SYSTEMS vol. 86, p. 1-8, 2019.
- 8. Polignano, Marco, Basile, Pierpaolo, de Gemmis, Marco. "Alberto: Italian BERT language understanding model for NLP challenging tasks based on tweets." 6th Italian Conference on Computational Linguistics, CLiC-it 2019. Vol. 2481. CEUR, 2019.
- Polignano, Marco, Basile, Valerio, Basile, Pierpaolo, de Gemmis, Marco, Semeraro, Giovanni. AIBERTo: Modeling Italian Social Media Language with BERT. IJCoL. Italian Journal of Computational Linguistics 5 (5-2), 11-31, 2019. DOI: <a href="https://doi.org/10.4000/ijcol.472">https://doi.org/10.4000/ijcol.472</a>
- Basile, Pierpaolo, Caputo, Annalina, Lawless, Séamus, Semeraro, Giovanni. Diachronic Analysis
  of Entities by Exploiting Wikipedia Page revisions. Proceedings of the International Conference on
  Recent Advances in Natural Language Processing (RANLP 2019), p. 84-91, 2019.
- Tsakalidis, Adam, Bazzi, Marya, Cucuringu, Mihai, Basile, Pierpaolo, McGillivray, Barbara. Mining the UK Web Archive for Semantic Change Detection. Proceedings of the International Conference on Recent Advances in Natural Language Processing (RANLP 2019), p. 1212-1221, 2019.
- Basile, Pierpaolo, Basile, Valerio, Nissim, Malvina, Novielli, Nicole, Patti, Viviana. Sentiment Analysis of Microblogging Data. Encyclopedia of Social Network Analysis and Mining. 2nd Ed. 2018.
- Musto Cataldo, Basile Pierpaolo, Lops Pasquale, de Gemmis Marco, Semeraro Giovanni (2017). Introducing linked open data in graph-based recommender systems. INFORMATION PROCESSING & MANAGEMENT, vol. 53, p. 405-435, ISSN: 0306-4573, DOI: 10.1016/j.ipm.2016.12.003
- Basile, Pierpaolo, Cassotti, Pierluigi, Siciliani, Lucia, Semeraro, Giovanni. Bi-directional LSTM-CNNs-CRF for Italian Sequence Labeling and Multi-Task Learning. IJCoL. Italian Journal of Computational Linquistics, vol 3 2-3, pp 37-50, 2017. DOI: https://doi.org/10.4000/ijcol.553
- Narducci, Fedelucio, Basile, Pierpaolo, Musto, Cataldo, Lops, Pasquale, Caputo, Annalina, de Gemmis, Marco, Iaquinta, Leo, Semeraro, Giovanni (2016). Concept-based item representations for a cross-lingual content-based recommendation process. INFORMATION SCIENCES, vol. 374, p. 15-31, ISSN: 0020-0255, DOI: 10.1016/j.ins.2016.09.022
- Basile, Pierpaolo, de Gemmis, Marco, Lops, Pasquale, Semeraro, Giovanni (2016). Solving a Complex Language Game by using Knowledge-based Word Associations Discovery. IEEE TRANSACTIONS ON COMPUTATIONAL INTELLIGENCE AND AI IN GAMES, vol. 8, p. 13-26, ISSN: 1943-068X, DOI: 10.1109/TCIAIG.2014.2355859
- Piero Molino, Lops, Pasquale, Semeraro, Giovanni, de Gemmis, Marco, Basile, Pierpaolo (2015).
   Playing with Knowledge: A Virtual Player for "Who Wants to Be a Millionaire?" that Leverages
   Question Answering Techniques. ARTIFICIAL INTELLIGENCE, vol. 222, p. 157-181, ISSN: 0004-3702, DOI: 10.1016/j.artint.2015.02.003
- Caputo, Annalina, Basile, Pierpaolo, Semeraro, Giovanni. Temporal random indexing: A system for analysing word meaning over time. IJCoL. Italian Journal of Computational Linguistics, vol 1 1-1, pp 61-74, 2015, DOI: https://doi.org/10.4000/ijcol.315
- Basile, Pierpaolo, Caputo, Annalina, Semeraro, Giovanni. "An enhanced lesk word sense disambiguation algorithm through a distributional semantic model." Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers. 2014.
- Semeraro, Giovanni, de Gemmis, Marco, Lops, Pasquale, Basile, Pierpaolo (2012). An Artificial Player for a Language Game. IEEE INTELLIGENT SYSTEMS, vol. 27(5), p. 36-43, ISSN: 1541-1672, DOI: 10.1109/MIS.2011.37

Pierpaolo Basile
According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.
Bari, April 14 2022.