


**PERSONAL INFORMATION** Giovanni Semeraro

 Università degli Studi di Bari Aldo Moro  
 Dipartimento di Informatica  
 Via E. Orabona, 4 –70126 Bari (BA), Italy



 <http://www.di.uniba.it/~semeraro/semeraro.html>

h-index: 52 total citations: 13079 (source: Google Scholar)

h-index: 36 total citations: 5012 (source: Scopus)

Enterprise	University	EPR
<input type="checkbox"/> Management Level	× Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

**WORK EXPERIENCE**

- October 2016 - present **Full Professor (INF/01 Informatics)**  
 Università degli Studi di Bari Aldo Moro, Dipartimento di Informatica
- Research topics: AI; machine learning; intelligent systems; recommender systems; knowledge graphs; explainable AI; conversational agents; user modelling and personalization; intelligent information access; semantics; NLP
- November 1998 – October 2016 **Associate Professor (INF/01 – Informatics)**  
 Università degli Studi di Bari, Dipartimento di Informatica
- Research topics: AI; machine learning; intelligent systems; inductive inference; inductive logic programming; recommender systems; user modelling and personalization; intelligent information mining, retrieval, and filtering; NLP; semantic web
- April 1993 – July 1993 **Visiting Research Assistant Specialist (invited)**  
 University of California, Irvine, USA, Department of Information and Computer Science
- Research topics: AI; machine learning; intelligent systems; inductive inference; expert systems
- July 1991 – November 1998 **Assistant Professor**  
 Università degli Studi di Bari, Dipartimento di Informatica
- Research topics: AI; machine learning; intelligent systems; inductive inference; expert systems
- June 1989 – July 1991 **Research Fellow**  
 TecnoPolis CSATA Novus Ortus, Advanced Software Technology division
- Research topics: AI; machine learning; intelligent systems; expert systems
- September 1988 – May 1989 **Research Fellow**  
 Software Sistemi SpA, Expert Systems division
- Research topics: AI; machine learning; intelligent systems; expert systems

**EDUCATION AND TRAINING**

Nov. 5, 1983- Mar. 25, 1988 **Laurea in Computer Science (Scienze dell'Informazione) (4 years)**  
 Università degli Studi di Bari

**PROJECTS**  
(last five years)**With leadership roles**

- 2021 - current iBWAM “intelligent Business platform for Wealth & Asset Management” funded by Objectway (PI)
- 2017 - 2021 UWPM “Unified Wealth Management Platform” funded by Objectway (PI)
- 2014 - 2017 MAIVISTO “Massive Adaptive Internet Video Streaming Using the Cloud”, MIUR START UP, PAC Big Data (scientific coordinator of the UNIBA unit)

**Project reviewer**

Cyprus Research Promotion Foundation (RPF) 2011, Free University of Bozen-Bolzano 2011,

Netherlands Organisation for Scientific Research (NWO) program "Veni" 2011, City University of Hong Kong Research Grants and Contracts Office program 'Strategic Research' 2011, EU Commission Framework Programme 7 (FP7) "Information and Communication Technologies", Strategic Objective 4.2 "Intelligent Content and Semantics" 2007

## COMMUNITY SERVICE (last 5y)

Steering Committee	ACM RecSys, ACM Conference Series on Recommender Systems (2018 - Present) IIR, Italian Information Retrieval workshop (2013 - 2016) ISMIS, International Symposium on Methodologies for Intelligent Systems (2008 - 2012)
General Chair	CLIC-it 2019
Workshops co-chair	Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS), in conjunction with ACM Conference on Recommender Systems (2014 - 2022) The 3rd International Workshop on Personalization & Recommender Systems in Financial Services (FinRec), in conjunction with ACM Conference on Recommender Systems 2022 "Explainable User Modeling (ExUM)", in conjunction with UMAP (2020 - 2022) "AI for Sustainable Development", in conjunction with Ital-IA 2022 "Explainable And Holistic User Modeling (ExHUM)", in conjunction with UMAP 2019 "eXplainable Artificial Intelligence (XAI)", in conjunction with AIXIA (2020 - 2021) New Trends in Content-based Recommender Systems (CBRecSys)", in conjunction with ACM Conference on Recommender Systems, 2016
TPC member	ACM RecSys from 2010 to 2022 (ACM Conference on Recommender Systems), ACM UMAP from 2014 to 2022 (ACM International Conference on User Modeling, Adaptation and Personalization), ECIR from 2016 to 2021 (European Conference on Information Retrieval), IJCAI 2020, ISMIS from 2016 to 2020 (International Symposium on Methodologies for Intelligent Systems)
Regular reviewer	User Modeling and User-Adapted Interaction: The Journal of Personalization Research, Journal of Intelligent Information Systems, International Journal of Human-Computer Studies, ACM Transactions on Information Systems, IEEE Transactions on Knowledge and Data Engineering, Electronic Commerce Research and Applications, International Journal on Semantic Web and Information Systems, ACM Transactions on the Web, Knowledge-Based Systems, ACM Transactions on Interactive Intelligent Systems

## EDITORIAL ACTIVITY

2015 - present	Member of the Editorial Board of the Italian Journal of Computational Linguistics (IJCoL)
2015 - 2016	Associate Editor ACM TiiS, special issue on Highlights of ACM Recommender Systems
2015	Associate Editor IJEG, special issue on Personalisation in e-Government and Smart Cities
2011 - 2013	Associate Editor ACM TiiS, special issue on Human Decision Making and RecSys
2004 - 2009	Member of the Editorial Board of the International Journal of Computational Intelligence (IJCI)
2004 - 2008	Member of the Editorial Board of the International Journal of Intelligent Systems and Information Processing (IJISIP)
2011 - 2018	Member of the Editorial Board of ISRN Artificial Intelligence (ISRN AI)
2005 - 2007	Associate Editor Applied Intelligence, special issue on Innovation in applied artificial intelligence
2007 - 2008	Member of the Editorial Board of the Int'l Journal of Metadata, Semantics and Ontologies (IJMSO)
2002 - 2003	Associate Editor Applied Artificial Intelligence, special issue on Artificial Intelligence for Cultural Heritage and Digital Libraries
1995 - 1996	Associate Editor AI*IA Notizie, special issue su L'Evoluzione della Ricerca sull'Apprendimento Automatico
2006 - 2007	Responsible for the "News from the Association" column in Intelligenza Artificiale, the Italian Association for Artificial Intelligence (AI*IA) magazine
1992 - 2003	Member of the Editorial Board of AI*IA Notizie, the AI*IA magazine
1992 - 2003	Responsible for the "Reviews" column in AI*IA Notizie, the AI*IA magazine

## PHD SUPERVISION

2016 - 2019	Gaetano Rossiello (now Researcher at IBM AI Watson, Yorktown Heights, USA), Leveraging Distributional and Relational Semantics for Knowledge Extraction from Textual Corpora (Best PhD thesis in AI award by the Italian Association for Artificial Intelligence AIXIA), XXXI cycle of the PhD Programme in Computer Science and Mathematics
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2009 - 2012	Cataldo Musto (now RTD-b at University of Bari), Enhanced Vector Space Models for Content-based Recommender Systems, XXIV cycle of the PhD Programme in Computer Science
2008 - 2011	Annalina Caputo (now Assistant Professor at Dublin City Univ., Ireland), Semantics and Information Retrieval: Models, Techniques and Applications, XXIII cycle of the PhD Programme in Computer Science
2007 - 2010	Anna Lisa Gentile (now Researcher at IBM Research, Almaden, USA), Entities and Identities: Named Entity Processing with Cultural Knowledge, XXII cycle of the PhD Programme in Computer Science
2007 - 2010	Leo Iaquinta (now R&D Manager at SO.CO.IN. / SYSTEM), Serendipity in Context: Context-aware Recommendations of Serendipitous Items, XXII cycle of the PhD Programme in Computer Science
2006 - 2009	Pierpaolo Basile (now Associate Professor at University of Bari), Word Sense Disambiguation and Intelligent Information Access (Best PhD thesis in NLP award by the Italian Association for Artificial Intelligence AIXIA), XXI cycle of the PhD Programme in Computer Science
2006 - 2009	Eufemia Tinelli (now Strategic Control and Quality of Services officer at Municipality of Bari), Efficient Reasoning Techniques for Large Datasets of DLs Instances: Approaches and Applications, XXI cycle of the PhD Programme in Computer Science
2005 - 2008	Domenico Redavid (now RTD-b at University of Bari), Towards the Orchestration of Semantic Web Services, XX cycle of the PhD Programme in Computer Science
2004 - 2007	Ignazio Palmisano (now Application Software Developer at CDL Manchester, UK), A Machine Learning Approach to Ontology Alignment, XIX cycle of the PhD Programme in Computer Science;
2002 - 2005	Oriana Licchelli (now Central Studies Director and Associate Professor in Information Technology at ESSCA Ecole de Management at Angers, France), Personalization in Digital Libraries for Education, XVII cycle of the PhD Programme in Computer Science
2002 - 2005	Marco de Gemmis (now Associate Professor at University of Bari), Learning User Profiles from Text for Personalized Information Access, XVI cycle of the PhD Programme in Computer Science
2002 - 2005	Pasquale Lops (now Associate Professor at University of Bari), Hybrid Recommendation Techniques based on User Profiles, XVI cycle of the PhD Programme in Computer Science

#### TEACHING

2022 - Present	MSc course on "Semantics in Intelligent Information Access"
2021 - 2022	MSc course on "Semantics in Intelligent Systems"
2008 - 2021	MSc course on "Intelligent Information Access and Natural Language Processing"
1995 - 2008	MSc course on "Formal Languages and Compilers"
2013 - 2014	PhD course on "Recommender Systems"
2000 - Present	BSc course on "Programming Languages"
2001 - 2013	BSc course on "Knowledge Management"

#### INSTITUTIONAL RESPONSIBILITIES

2020 - Present	Coordinator of the Research Unit "Artificial Intelligence-based eHealth" of the Telemedicine Research Centre (CITEL) at University of Bari
2018 - Present	Member of the Steering Committee of the National Laboratory of Artificial Intelligence and Intelligent Systems (AIIS) of the National Interuniversity Consortium for Informatics (CINI)
2018 - 2022	Member of the Board (Giunta) of the Dipartimento di Informatica at University of Bari
2013 - 2016	
2015	Co- Founder of the Italian Association for Computational Linguistics (AILC)
2015	Coordinator of the 1st edition of the Vocational Master in Data Science at University of Bari
2015 - Present	Member of the Scientific Committee of the Vocational Master in Data Science at University of Bari
2023 - Present	Member of the Academic Board of the National PhD Programme in Artificial Intelligence (XXXIX cycle)
2014 - Present	Member of the Academic Board of the PhD Programme in Computer Science and Mathematics at University of Bari (XXIX-XXXIX cycles)

2005 - Present	Founder and Head of the Semantic Web Access and Personalization (SWAP) "Antonio Bello" research group, Dipartimento di Informatica at University of Bari
2015 - 2018	Member of the Board of Directors of the Italian Association for Computational Linguistics (AILC)
2013 - 2016	Coordinator of the Master Program of Computer Science at the University of Bari
2011 - 2014	Coordinator of the Master "Specialist technicians in the management of information systems based on the semantic manipulation of information" at University of Bari
2011 - 2014	Member of the Scientific Committee of the Master "Specialist technicians in methodologies for programming semantic systems" at Technical University of Bari
2006 - 2011	Member of the Board of Directors of the Italian Association for Artificial Intelligence (AI*IA)
2006 - 2009	Member of the Board of Directors of the Gruppo ricercatori ed Utenti di Logic Programming (GULP)
2000 - 2016	Member of the Academic Board of the PhD Programme in Computer Science at University of Bari (XV-XXVIII cycles)

**INVITED TALKS**

2019	"Advances in Content-based Recommender Systems I and II", The ACM Summer School on Recommender Systems, Gothenburg, Sweden, September
2019	"L'IA per l'empowerment del cittadino", XVI Congresso Nazionale Associazione 'Luca Coscioni', 'Fiera delle Liberta', Bari, Italy, October
2017	"Recent Developments of Content-based Recommender Systems", The ACM Summer School on Recommender Systems, Bozen-Bolzano, Italy, August
2017	"An investigation on the Serendipity Problem in Recommender Systems", Research Workshop of the Israel Science Foundation on User Modeling and Recommender Systems, Haifa, Israel, July
2015	"On Serendipity in Recommender Systems", Social and Semantic aspects of recommender systems - A workshop on advances in recommender systems (RecSoc 2015), Haifa, Israel, June
2015	"Case-based Recommender Systems for Personalized Finance Advisory", Int'l Workshop on Personalization & Recommender Systems in Financial Services (FinRec 2015), Graz, Austria, April
2014	"Personality and Emotions in Decision Making and Recommender Systems", International Workshop on First International Workshop on Decision Making and Recommender Systems (DMRS2014), Bolzano, Italy, September 18-19
2013	"Recommender Systems in the Banking/Financial Domain", Smart Companies and Artificial Intelligence: Tecnologie Intelligenti al Servizio delle Aziende, Firenze, Italy, May 14
2012	"Machine (Learn-Read)ing for Knowledge Infusion in Small Brains from Big Data", MLDM.it , 1st Italian Workshop on Machine Learning and Data Mining, 12th AI*IA Symposium on Artificial Intelligence, Rome, Italy, June 13

**FELLOWSHIPS AND AWARDS**

2022	Award - Best performing approach for Shared Task: "FINTOC'4 -Table Of Content extraction from Financial Documents", subtask on Spanish data, Financial Narrative Processing Workshop (FNP)
2015	Award - IBM Faculty Award, project "Deep Learning to boost Cognitive Question Answering"
2014	Award - Best performing approach for Task "Top-N recommendation from binary user feedback" of the "SemWebEval Linked Open Data-enabled Recommender Systems Challenge", Extended Semantic Web Conference (ESWC).
2014	Award - Best Young Paper Award, Italian Conference on Computational Linguistics (CLIC-it)
2013	Award - Most Inspiring Contribution Award for the paper "Leveraging Encyclopedic Knowledge for Transparent and Serendipitous User Profiles", 21st International Conference on User Modeling, Adaptation and Personalization (UMAP)
1997	Award - Outstanding reviewer, IJCAI-97
1996	Award - Best Paper Award for the paper "Discovering Causal Rules in Relational Databases", 13 European Meeting on Cybernetics and Systems Research

- 1988 -1989 Fellowship - Scholarship winner, Software Sistemi SpA, research on Expert Systems
- 1988 Award - SIP (Società Italiana Per l'esercizio telefonico, now Telecom Italia) Best Thesis Award, for the BSc thesis "A system for conceptual inductive learning from examples with variable-valued logic"

## PUBLICATIONS

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Publications  
best and most relevant  
in the last 10 years

1. C Musto, G. Spillo, G. Semeraro (2023). Harnessing distributional semantics to build context-aware justifications for recommender systems. *User Modeling and User-Adapted Interaction*, ISSN: 0924-1868, DOI: 10.1007/s11257-023-09382-x
2. A. D. Starke, C. Musto, A. Rapp, G. Semeraro, C. Trattner (2023). "Tell Me Why": using natural language justifications in a recipe recommender system to support healthier food choices. *User Modeling and User-Adapted Interaction*, 1-34, ISSN: 0924-1868, DOI: 10.1007/s11257-023-09377-8
3. A. Iovine, F. Narducci, C. Musto, M. de Gemmis, G. Semeraro (2023). Virtual Customer Assistants in finance: From state of the art and practices to design guidelines. *Computer Science Review*, 47, 100534, ISSN: 1574-0137, DOI: 10.1016/j.cosrev.2023.100534
4. M. Polignano, P. Lops, M. de Gemmis, G. Semeraro, G. (2023). HELENA: An intelligent digital assistant based on a Lifelong Health User Model. *Information Processing & Management*, 60(1), 103124, ISSN: 0306-4573, DOI: 10.1016/j.ipm.2022.103124
5. P. Lops, M. Polignano, C. Musto, A. Silletti, G. Semeraro (2023). MYRS: An end-to-end framework for reproducible knowledge-aware recommender systems. *Information Systems* 119: 102273, ISSN: 0306-4379, DOI: 10.1016/j.is.2023.102273
6. F. Lorè, P. Basile, A. Appice, M. de Gemmis, D. Malerba, G. Semeraro (2023). An AI framework to support decisions on GDPR compliance. *Journal of Intelligent Information Systems* 61: 541-568, ISSN: 0925-9902, DOI: 10.1007/s10844-023-00782-4
7. L. Siciliani, P. Basile, P. Lops, G. Semeraro (2022). MQALD: Evaluating the impact of modifiers in question answering over knowledge graphs. *Semantic Web* 13(2): 215-231, ISSN: 1570-0844, DOI: 10.3233/SW-210440
8. A. Iovine, P. Lops, F. Narducci, M. de Gemmis, G. Semeraro (2022). An empirical evaluation of active learning strategies for profile elicitation in a conversational recommender system. *Journal of Intelligent Information Systems* 58: 337-362, ISSN: 0925-9902, DOI: 10.1007/s10844-021-00683-4
9. M. Polignano, F. Narducci, M. de Gemmis, G. Semeraro (2021). Towards Emotion-aware Recommender Systems: an Affective Coherence Model based on Emotion-driven Behaviors. *Expert Systems with Applications* 170: 114382, ISSN: 0957-4174, DOI: 10.1016/j.eswa.2020.114382
10. C. Musto, P. Lops, M. de Gemmis, G. Semeraro (2021). Context-aware graph-based recommendations exploiting Personalized PageRank. *Knowledge-Based Systems* 216: 106806, ISSN: 0950-7051, DOI: 10.1016/j.knsys.2021.106806
11. C. Musto, F. Narducci, Marco Polignano, M. de Gemmis, P. Lops, G. Semeraro (2021). MyrrorBot: A Digital Assistant Based on Holistic User Models for Personalized Access to Online Services. *ACM Transactions on Information Systems* 39(4): 46:1-46:34, ISSN: 1046-8188, DOI: 10.1145/3447679
12. C. Musto, M. de Gemmis, P. Lops, G. Semeraro (2021). Generating post hoc review-based natural language justifications for recommender systems. *User Modeling and User-Adapted Interaction* 31(3): 629-673, ISSN: 0924-1868, DOI: 10.1007/s11257-020-09270-8
13. V. Lingardi, N. Carone, G. Semeraro, C. Musto, M. D'amico, S. Brena (2020). Mapping Twitter hate speech towards social and sexual minorities: a lexicon-based approach to semantic content analysis. *Behaviour & Information Technology* 39(7): 711-721 (2020), ISSN: 0144-929X, DOI: 10.1080/0144929X.2019.1607903
14. A. Iovine, F. Narducci, G. Semeraro (2020). Conversational Recommender Systems and natural language: A study through the ConveRSE framework. *Decision Support Systems* 131: 113250, ISSN: 0167-9236, DOI: 10.1016/j.dss.2020.113250
15. C. Musto, M. Polignano, G. Semeraro, M. de Gemmis, P. Lops (2020). Myrror: a platform for holistic user modeling. *User Modeling and User-Adapted Interaction* 30(3): 477-511, ISSN: 0924-1868, DOI: 10.1007/s11257-020-09272-6
16. F. Narducci, P. Basile, M. de Gemmis, P. Lops, G. Semeraro (2020). An investigation on the user interaction modes of conversational recommender systems for the music domain. *User Modeling and User Adapted Interaction* 30(2): 251-284, ISSN: 0924-1868, DOI: 10.1007/s11257-019-09250-7
17. P. Lops, C. Musto, F. Narducci, G. Semeraro (2019). *Semantics in Adaptive and Personalised Systems - Methods, Tools and Applications*. Springer, pp. 1-186, ISBN 978-3-030-05617-9
18. C. Musto, F. Narducci, P. Lops, M. de Gemmis, G. Semeraro (2019). Linked open data-based explanations for transparent recommender systems. *International Journal of Human-Computer Studies* 121: 93-107, ISSN: 1071-5819, DOI: 10.1016/j.ijhcs.2018.03.003
19. P. Basile, C. Greco, A. Suglia, G. Semeraro (2019). Bridging the gap between linked open data-based recommender systems and distributed representations. *Information Systems* 86: 1-8, ISSN: 0306-4379, DOI: 10.1016/j.is.2019.07.001
20. C. Musto, P. Basile, P. Lops, M. de Gemmis, G. Semeraro (2017). Introducing linked open data in graph-based recommender systems. *Information Processing & Management* 53(2): 405-435, ISSN: 0306-4573, DOI: 10.1016/j.ipm.2016.12.003
21. F. Narducci, P. Lops, G. Semeraro (2017). Power to the patients: The HealthNetsocial network. *Information Systems* 71: 111-122, ISSN: 0306-4379, DOI: 10.1016/j.is.2017.07.005
22. F. Narducci, M. Palmonari, G. Semeraro (2017). Cross-lingual link discovery with TR-ESA. *Information Sciences* 394: 68-87, ISSN: 0020-0255, DOI: 10.1016/j.ins.2017.02.019
23. C. Musto, P. Lops, M. de Gemmis, G. Semeraro (2017). Semantics-aware Recommender Systems exploiting Linked Open Data and graph-based features. *Knowledge-Based Systems* 136: 1-14, ISSN: 0950-7051, DOI: 10.1016/j.knsys.2017.08.015
24. F. Narducci, P. Basile, C. Musto, P. Lops, A. Caputo, M. de Gemmis, L. Iaquina, G. Semeraro (2016). Concept-based item representations for a cross-lingual content-based recommendation process. *Information Sciences* 374: 15-31, ISSN: 0020-0255, DOI: 10.1016/j.ins.2016.09.022
25. P. Basile, M. de Gemmis, P. Lops, G. Semeraro (2016). Solving a Complex Language Game by Using Knowledge-Based Word Associations Discovery. *IEEE Transactions on Computational Intelligence and AI in*

- Games 8(1): 13-26, ISSN: 1943-068X, DOI: 10.1109/TCIAIG.2014.2355859
26. P. Molino, P. Lops, G. Semeraro, M. de Gemmis, P. Basile (2015). Playing with knowledge: A virtual player for "Who Wants to Be a Millionaire?" that leverages question answering techniques. *Artificial Intelligence* 222: 157-181, ISSN: 0004-3702, DOI: 10.1016/j.artint.2015.02.003
  27. C. Musto, G. Semeraro, P. Lops, M. de Gemmis, G. Lekkas (2015). Personalized finance advisory through case-based recommender systems and diversification strategies. *Decision Support Systems* 77: 100-111, ISSN: 0167-9236, DOI: 10.1016/j.dss.2015.06.001
  28. M. de Gemmis, P. Lops, G. Semeraro, C. Musto (2015). An investigation on the serendipity problem in recommender systems. *Information Processing & Management* 51(5): 695-717, ISSN: 0306-4573, DOI: 10.1016/j.ipm.2015.06.008
  29. C. Musto, G. Semeraro, P. Lops, M. de Gemmis (2015). CrowdPulse: A framework for real-time semantic analysis of social streams. *Information Systems* 54: 127-146, ISSN: 0306-4379, DOI: 10.1016/j.is.2015.06.007
  30. P. Basile, A. Caputo, G. Semeraro (2014). An enhanced Lesk word sense disambiguation algorithm through a distributional semantic model. In *Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers* (pp. 1591-1600), ACL 2014, ISBN 978-1-941643-26-6.

Bari 13.02.2024

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.