PERSONAL INFORMATION

Marco de Gemmis

Università degli Studi di Bari Aldo Moro
Dipartimento di Informatica
via Orabona 4, 70125 – Bari (BA), Italy

+39 0805443283 (office)

marco.degemmis@uniba.it

https://swap.di.uniba.it/members/degemmis.marco/

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ Mid-Management Level	☒ Associate Professor	☐ 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

Mar 2020 - current

Associate Professor (INF/01 Computer Science)

University of Bari Aldo Moro, Department of Computer Science

- Coordination of research projects.
- Research guidance of MSc students, PhD students and post-doc researchers.
- Teaching, coordination of post-laurea activities (vocational master).
- Activities in the research community: invited talks, conference organization, Program Committee membership.
- Editorial activities, writing scientific papers.
- Technological transfer activities.

Mar 2009 – Mar 2020

Assistant Professor (INF/01 Computer Science)

University of Bari Aldo Moro, Department of Computer Science

- Participation in research projects.
- Research guidance of MSc students, PhD students and post-doc researchers.
- Teaching and support to teaching activities (exams, tutoring).
- Activities in the research community: invited talks, conference organization, Program Committee membership.
- Editorial activities, writing scientific papers.
- Technological transfer activities.

Apr 2005-Mar 2009

Research Fellow (Post-Doc Researcher)

University of Bari Aldo Moro, Department of Computer Science

- Participation in research projects.
- Research guidance of MSc students.
- Support to teaching activities (exams, tutoring, seminars).
- Activities in the research community: invited talks, Program Committee membership.
- Editorial activities, writing scientific papers.

Jan 2000-Nov 2001

Java Programmer

Sword Srl, Italy

- Software development.

EDUCATION AND TRAINING

Nov 2001-Oct 2004

PhD in Computer Science

University of Bari

- Communication: academic writing, presentation skills.
- Research skills: expertise in machine learning, information retrieval, natural language processing, recommendation systems, data analysis, experiment design, project management.
- Interpersonal: networking, teamwork.

Oct 1992-Dec 1999

Master degree in Computer Science

University of Bari

- Analysis and problem solving, programming.
- Expertise in natural language processing and semantic search.
- First experience in a research project (thesis).

WORK ACTIVITIES

Conference Organization

- 2025: ACM RecSys Program Chair (CORE Rank: A)
- 2024: ACM RecSys Doctoral Symposium Chair
- 2018: ACM UMAP Workshop and Tutorial Chair
- 2013: ACM UMAP Doctoral Consortium Chair

Awards

- 2026: Outstanding Senior PC Member, ACM RecSys (CORE Rank: A)
- 2014: 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).
- 2013: 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).

Editorial activity

- since 2025: Associate Editor ACM Transactions on Recommender Systems
- 2022-2025: Distinguished reviewer, ACM Transactions on Recommender Systems
- 2016: Editor of the book “Emotions and Personality in Personalized Services Models, Evaluation and Applications”, Springer.

Invited presentations

- Lecturer at ACM Recommender Systems Summer School (2017, 2019, 2023, 2024) on the topic: “Recent Developments of Content-Based Recommender Systems”.
- Keynote Speech on “Deep content analytics methods to improve transparency and serendipity of recommender systems” at: SERecSys - Workshop on Semantics-Enabled Recommender Systems, IEEE International Conference on Data Mining (ICDM 2016).

Grants

- 2022-2023: Principal Investigator of the industry research contract: “LUTECH DIGITALE 4.0: Tecniche di Recommendation per la piattaforma di loyalty Management”, funded by Lutech SpA.
- 2019-2020: coordinator of the unit of the University of Bari in the Regional project “Feel at Home”, POR Puglia FESR-FSE 2014-2020 INNOLABS (2019-2020).
- 2018-2020: coordinator of the unit of the University of Bari in the Regional project “DECiSION - Data-drivEn Customer Service InnovatiON”, POR Puglia FESR-FSE 2014-2020 INNONETWORK (2018-2020).
- 2016-2019: coordinator of the unit of the University of Bari in the European project “SEO-DWARF - Semantic EO Data Web Alert and Retrieval Framework”, Horizon 2020, Marie Skłodowska-Curie Action: Research and Innovation Staff Exchange (RISE).
- 2017-2020: Principal Investigator of the project “Natural Language Inference for Question Answering (NaLIQA)”, PRIN 2015 proposal not funded by the MIUR, but funded by the University of Bari as local project, due to excellent national evaluation.

ADDITIONAL INFORMATION

Publications

Total number of Scopus publications: 259
Total number of Scopus citations: 4069
H index: 35 (Scopus)

Main Publications in the last 10 years

- Giuseppe Spillo, Elio Musacchio, Cataldo Musto, Marco de Gemmis, Pasquale Lops, and Giovanni Semeraro. 2025. See the Movie, Hear the Song, Read the Book: Extending MovieLens-1M, Last.fm-2K, and DBbook with Multimodal Data. In Proceedings of the Nineteenth ACM Conference on Recommender Systems (RecSys '25). Association for Computing Machinery, New York, NY, USA, 847–856. https://doi.org/10.1145/3705328.3748162
- Cataldo Musto, Alessandro Francesco Maria Martina, Andrea Iovine, Fedelucio Narducci, Marco de Gemmis, Giovanni Semeraro. Tell me what you Like: introducing natural language preference elicitation strategies in a virtual assistant for the movie domain. J. Intell. Inf. Syst. 62(2): 575-599 (2024)
- Filippo Lorè, Pierpaolo Basile, Annalisa Appice, Marco de Gemmis, Donato Malerba, Giovanni Semeraro. An AI framework to support decisions on GDPR compliance. J. Intell. Inf. Syst. 61(2): 541-568 (2023).
- Iovine A., Lops P., Narducci F., de Gemmis M., Semeraro G. (2021). An empirical evaluation of active learning strategies for profile elicitation in a conversational recommender system. JOURNAL OF INTELLIGENT INFORMATION SYSTEMS, ISSN: 0925-9902, doi: 10.1007/s10844-021-00683-4
- Musto, Cataldo, Lops, Pasquale, de Gemmis, Marco, Semeraro, Giovanni (2021). Context-aware graph-based recommendations exploiting Personalized PageRank. KNOWLEDGE-BASED SYSTEMS, vol. 216, ISSN: 0950-7051, doi: 10.1016/j.knosys.2021.106806
- Musto, Cataldo, Narducci, Fedelucio, Polignano, Marco, de Gemmis, Marco, Lops, Pasquale, Semeraro, Giovanni (2021). MyrrorBot: A Digital Assistant Based on Holistic User Models for Personalized Access to Online Services. ACM TRANSACTIONS ON INFORMATION SYSTEMS, vol. 39, p. 1-34, ISSN: 1046-8188, doi: 10.1145/3447679
- Vasilis Kopsachilis, Lucia Siciliani, Marco Polignano, Pol Kolokoussis, Michail Vaitis, Marco de Gemmis, Konstantinos Topouzelis (2021). Semantically-Aware Retrieval of Oceanographic Phenomena Annotated on Satellite Images. INFORMATION, vol. 12, ISSN: 2078-2489, doi: 10.3390/info12080321
- Polignano, Marco, Narducci, Fedelucio, de Gemmis, Marco, Semeraro, Giovanni (2021). Towards Emotion-aware Recommender Systems: an Affective Coherence Model based on Emotion-driven Behaviors. EXPERT SYSTEMS WITH APPLICATIONS, ISSN: 0957-4174, doi: 10.1016/j.eswa.2020.114382
- Narducci F., Basile P., de Gemmis M., Lops P., Semeraro G. (2020). 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, ISSN: 0924-1868, doi: 10.1007/s11257-019-09250-7
- Musto C., de Gemmis M., Lops P., Semeraro G. (2020). Generating post hoc review-based natural language justifications for recommender systems. USER MODELING AND USER-ADAPTED INTERACTION, ISSN: 0924-1868, doi: 10.1007/s11257-020-09270-8
- Polignano M., Narducci F., Iovine A., Musto C., De Gemmis M., Semeraro G. (2020). HealthAssistantBot: A Personal Health Assistant for the Italian Language. IEEE ACCESS, vol. 8, p. 107479-107497, ISSN: 2169-3536, doi: 10.1109/ACCESS.2020.3000815
- Musto C., Polignano M., Semeraro G., de Gemmis M., Lops P. (2020). Myrror: a platform for holistic user modeling: Merging data from social networks, smartphones and wearable devices. USER MODELING AND USER-ADAPTED INTERACTION, vol. 30, p. 477-511, ISSN: 0924-1868, doi: 10.1007/s11257-020-09272-6
- Donato Malerba, Annalisa Appice, Paolo Buono, Giovanna Castellano, Berardina De Carolis, Marco De Gemmis, Marco Polignano, Veronica Rossano, Lynn Margaret Rudd (2019). Advanced Programming of Intelligent Social Robots. JE-LKS. JOURNAL OF E-LEARNING AND KNOWLEDGE SOCIETY, vol. 15, p. 13-26, ISSN: 1826-6223, doi: 10.20368/1971-8829/1611
- Musto, Cataldo, Narducci, Fedelucio, Lops, Pasquale, de Gemmis, Marco, Semeraro, Giovanni (2019). Linked open data-based explanations for transparent recommender systems. INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES, vol. 121, p. 93-107, ISSN: 1071-5819, doi: 10.1016/j.ijhcs.2018.03.003
- Narducci, Fedelucio, Musto, Cataldo, de Gemmis, Marco, Lops, Pasquale, Semeraro, Giovanni (2018). TV-Program Retrieval and Classification: A Comparison of Approaches based on Machine Learning. INFORMATION SYSTEMS FRONTIERS, vol. 20, p. 1157-1171, ISSN: 1387-3326, doi: 10.1007/s10796-017-9780-0
- 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
- De Carolis, Berardina, de Gemmis, Marco, Lops, Pasquale, Palestra, Giuseppe Carlo (2017). Recognizing users feedback from non-verbal communicative acts in conversational recommender systems. PATTERN RECOGNITION LETTERS, vol. 99, p. 87-95, ISSN: 0167-8655, doi: 10.1016/j.patrec.2017.06.011
- Musto, Cataldo, Lops, Pasquale, de Gemmis, Marco, Semeraro, Giovanni (2017). Semantics-aware Recommender Systems exploiting Linked Open Data and graph-based features. KNOWLEDGE-BASED SYSTEMS, vol. 136, p. 1-14, ISSN: 0950-7051, doi: 10.1016/j.knosys.2017.08.015
- 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

- M. de Gemmis, P. Lops, G. Semeraro, C. Musto (2015). An Investigation on the Serendipity Problem in Recommender Systems. INFORMATION PROCESSING & MANAGEMENT, vol. 51, p. 695-717, ISSN: 0306-4573, doi: 10.1016/j.ipm.2015.06.008
- Musto, Cataldo, Semeraro, Giovanni, Lops, Pasquale, de Gemmis, Marco (2015). CrowdPulse: A framework for real-time semantic analysis of social streams. INFORMATION SYSTEMS, vol. 54, p. 127-146, ISSN: 0306-4379, doi: 10.1016/j.is.2015.06.007
- Musto, Cataldo, Semeraro, Giovanni, Lops, Pasquale, de Gemmis, Marco, Georgios Lekkas (2015). Personalized Finance Advisory through Case-based Recommender Systems and Diversification Strategies. DECISION SUPPORT SYSTEMS, vol. 77, p. 100-111, ISSN: 0167-9236, doi: 10.1016/j.dss.2015.06.001
- 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
- Lops, Pasquale, de Gemmis, Marco, Semeraro, Giovanni, Musto, Cataldo, Narducci, Fedelucio (2013). Content-based and collaborative techniques for tag recommendation: an empirical evaluation. JOURNAL OF INTELLIGENT INFORMATION SYSTEMS, vol. 40, p. 41-61, ISSN: 0925-9902, doi: 10.1007/s10844-012-0215-6
- Semeraro, Giovanni, Lops, Pasquale, de Gemmis, Marco, Musto, Cataldo, Narducci, Fedelucio (2012). A Folksonomy-based Recommender System for Personalized Access to Digital Artworks. ACM JOURNAL ON COMPUTING AND CULTURAL HERITAGE, vol. 5(3), p. 11:1-11:22, ISSN: 1556-4673, doi: 10.1145/2362402.2362405
- 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

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, 02/11/2026