PERSONAL INFORMATION

Pasquale Lops



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Google Scholar profile: https://scholar.google.com/citations?user=1MHRACkAAAAJ&hl=it

Scopus profile: https://www.scopus.com/authid/detail.uri?authorId=6602373827

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

Apr 2024 – present
Co-founder
AI2B srl – Accredited spin-off of the University of Bari Aldo Moro, Italy

July 2023 – present
Full Professor (INF/01 – Informatics)
University of Bari Aldo Moro, Department of Computer Science

May 2019 – July 2023
Associate Professor (INF/01 Computer Science)
University of Bari Aldo Moro, Department of Computer Science

Jan 2004 – May 2019
Assistant Professor (ING-INF/05 Information Processing Systems)
University of Bari Aldo Moro, Department of Computer Science

July 2004 – Sept 2004
Visiting researcher
Fraunhofer Integrated Publications and Informations Systems Institute - IPSI (Darmstadt, Germania)

EDUCATION AND TRAINING

Nov 2001-Oct 2004
PhD in Computer Science
University of Bari

Oct 1992-Mar 1997
Laurea degree in Computer Science (Scienze dell'Informazione)
University of Bari

WORK ACTIVITIES

Awards

2026: Best paper award at 1st Workshop on Trustworthy and Adaptive LLMs for Mental and Physical Wellbeing in Recommendations @UMAP 2026, (LLM 4 WellRec@UMAP 2026), Goteborg, Svezia, June 8, 2026 for the paper “Evaluating Generative Text-to-Motion for Occupational Wellbeing Recommender Systems”.

2023: Best student paper award, for the paper “Combining Graph Neural Networks and Sentence Encoders for Knowledge-aware Recommendations”, 31st ACM Conference on User Modeling, Adaptation and Personalization (UMAP)

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, Adapatation and Personalization (UMAP).

Editorial activity

- Associate Editor of ACM Transactions on Recommender Systems (since 2025)
- Member of the Editorial Board of User Modeling and User-Adapted Interaction - The Journal of Personalization Research (since 2022)
- Member of the Reviewer Board of the ACM Transactions on Recommender Systems (since 2021)
- Member of the Editorial Board of Frontiers in Big Data (Recommender Systems) (since 2021)
- Member of the Editorial Board of Journal of Intelligent Information Systems (since 2020)
- Member of the Reviewer Board of International Journal on Semantic Web and Information Systems (since 2016)
- Member of the Editorial Reviewer Board of Frontiers in Robotics and AI (Computational Intelligence) (since 2015)

Invited presentations

- Tutorial on “Accountable Knowledge-aware Recommender Systems", 31st ACM Conference on User Modeling, Adaptation and Personalization (UMAP), Lymassol (2023).
- Tutorial on “Semantics-aware Content Representations for Reproducible Recommender Systems (SCoRe)”, 30th ACM Conference on User Modeling, Adaptation and Personalization (UMAP), Barcelona (2022).
- Tutorial “Semantics-Aware Techniques for Social Media Analysis, User Modeling, and Recommender Systems”, 25th Conference on User Modeling, Adaptation and Personalization (UMAP), Bratislava (2017).
- Tutorial “Semantics-Aware Techniques for Social Media Analysis, User Modeling, and Recommender Systems”, 24th Conference on User Modeling, Adaptation and Personalization (UMAP), Halifax (2016).
- Lecturer at ACM Recommender Systems Summer School (2017, 2019) on the topic: “Recent Developments of Content-Based Recommender Systems”.
- Keynote Speech on “Generating Natural Language Explanations for Recommender Systems” at: Research Workshop of the Israel Science Foundation on User Modeling and Recommender Systems, Haifa (2017).
- Coursera Interview “Beyond TFIDF”, in “Introduction to Recommender Systems: Non-Personalized and Content-Based” specialization, of the Recommender Systems course (2017)
- Keynote speech “Semantics-aware Content-based Recommender Systems: the Big Picture”, Social and Semantic aspects of recommender systems - A workshop on advances in recommender systems (RecSoc), Haifa (2015)
- Keynote speech su “Semantics-aware Content-based Recommender Systems: the Big Picture”, 1st Workshop on New Trends in Content-Based Recommender Systems (RecSys), Foster City, Silicon Valley (2014)
- Invited Seminar on “Information Retrieval and Information Filtering: two battlefields for NLP techniques”, University of Basque Country, San Sebastian (Spain), 2011.”
- Invited talk on “Language technologies to support content-based Intelligent Information Access Systems” at “Forum TAL: - Trattamento Automatico della Lingua”, Accademia dei Lincei, Rome, 2010.
- Keynote Speech on “Document Indexing based on Word Sense Disambiguation, WordNet and Wikipedia” at Workshop on Natural Language Processing, AI*IA 2008.
- Lecturer on “Intelligent Information Access” for the Winter School AI*IA ENEA on "Artificial Intelligence on Cultural Heritage", Università degli Studi di Milano Bicocca, 5-9 February 2007

Grants

- 2019-2022: coordinator of the unit of the University of Bari in the European project “Social and Creative”, Interreg-Mediterranean, priority axis 1: Promoting Mediterranean innovation capacities to develop smart and sustainable growth, Programme specific objective 1.1 To increase transnational activity of innovative clusters and networks of key sectors of the MED area.
- 2018-2019: coordinator of the unit of the University of Bari in the European project “Territorial Appropriation of Leading-edge Innovation Action (TALIA)”, Interreg-Mediterranean, priority axis 1: Promoting Mediterranean innovation capacities to develop smart and sustainable growth, Programme specific objective 1.1 To increase transnational activity of innovative clusters and networks of key sectors of the MED area.
- 2018-2022 Management Committee Substitute COST Action “A network for Gravitational Waves, Geophysics and Machine Learning”.

Teaching

Courses taught at the University of Bari:

- “Programming Languages”, Bachelor Program in Computer Science, since 2005.
- “Information Retrieval”, Bachelor Program in Computer Science, since 2013.
- “Recommender Systems”, Master Program in Data Science, since 2020.

Research interests

The primary research interests of Pasquale Lops include content-based recommender systems and user modelling, with a specific focus on the adoption of techniques for semantic content representation. He is best known for his work in content-based filtering recommender systems.
He authored the textbook "Semantics in Adaptive and Personalized Systems: Methods, Tools and Applications", published by Springer and the most cited publication is:
Pasquale Lops, Marco de Gemmis, Giovanni Semeraro. Content-based Recommender Systems: State of the Art and Trends. Recommender Systems Handbook 2011, Springer: 73-105 (2256 citations on Google Scholar on April 2022).
His research focuses on the definition of methods for semantics-aware recommender systems which overcome the limitations and ambiguity of natural language through deep understanding of text. His research is also focused to ensure the reproducibility of the whole recommendation pipeline, to have accountable recommender systems. He recently investigated how to leverage Large Language Models to empower recommender systems.

Management Services

- 2026-: Deputy Director of the Department of Computer Science, University of Bari Aldo Moro
- 2023-present: Erasmus+ Delegate for the Department of Computer Science, University of Bari
- 2013-2015: Member of the Joint Professor-Student Commission of the School of Sciences and Technologies of the University of Bari.
- 2020-2021: Coordinator of the Vocational Master in Data Science of the University of Bari.
- 2017-2018: Coordinator of the Vocational Master in Data Science of the University of Bari.
- 2008-2011: Member of the Board (Giunta) of the Department of Computer Science.

Conference Services

- 2025: Proceedings Chair of the 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR)
- 2024: General Chair of the ACM International Conference on Recommender Systems (RecSys)
- 2013, 2020: Workshop e Tutorial Chair for International Conference on User Modeling, Adaptation and Personalization (UMAP)
- 2018: Late-Breaking Result and Demo Chair for International Conference on User Modeling, Adaptation and Personalization (UMAP)
- 2012, 2013: Program Chair for International Conference on Electronic Commerce and Web Technologies (EC-Web 2012, 2013)
- 2014-2025: Program Chair of the Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS), in conjunction with ACM Conference on Recommender Systems.
- 2022: Program Chair of the International Workshop on “Adaptive and Personalized Explainable User Interfaces (APEx-UI)”, in conjunction with IUI 2022.
- 2012,2013: Program Chair del Workshop “Human Decision Making in Recommender Systems”, in conjunction with ACM Conference on Recommender Systems.

PhD supervision and mentoring

PhD students supervised at University of Bari:

- Gaetano Dibenedetto. Artificial Intelligence Approaches for Digital Healthcare through Pose Detection and Recommender Systems in eHealth, XXXIX Cycle.
- Lucia Siciliani. Question Answering over Knowledge Bases, PhD program in Computer Science and Mathematics, XXXIII Cycle.
- Piero Molino. Semantic Models for Question Answering. PhD program in Computer Science, XXVII Cycle.
- Fedelucio Narducci. Knowledge-enriched Representations for Content-based Recommender Systems. PhD program in Computer Science, XXIV Cycle.

Participation to PhD Committees:

- Universidad Autónoma de Madrid, Spain (2017)
- University of Turin (2017, 2012)
- Politecnico di Milano (2018, 2017)
- Free University of Bolzano (2016)
- Politecnico di Bari (2014).

ADDITIONAL INFORMATION

Journal Publications

- Gaetano Dibenedetto, Stefanos Sotiropoulos, Marco Polignano, Giuseppe Cavallo, Pasquale Lops: Comparing Human Pose Estimation through deep learning approaches: An overview. Comput. Vis. Image Underst. 252: 104297 (2025)
- Lucia Siciliani, Eleonora Ghizzota, Pierpaolo Basile, Pasquale Lops: OIE4PA: open information extraction for the public administration. J. Intell. Inf. Syst. 62(1): 273-294 (2024)
- Giuseppe Spillo, Cataldo Musto, Marco de Gemmis, Pasquale Lops, Giovanni Semeraro: Recommender systems based on neuro-symbolic knowledge graph embeddings encoding first-order logic rules. User Model. User Adapt. Interact. 34(5): 2039-2083 (2024)
- Marco Polignano, Pasquale Lops, Marco de Gemmis, Giovanni Semeraro: HELENA: An intelligent digital assistant based on a Lifelong Health User Model. Inf. Process. Manag. 60(1): 103124 (2023)
- Pasquale Lops, Marco Polignano, Cataldo Musto, Antonio Silletti, Giovanni Semeraro: ClayRS: An end-to-end framework for reproducible knowledge-aware recommender systems. Inf. Syst. 119: 102273 (2023)
- Lucia Siciliani, Vincenzo Taccardi, Pierpaolo Basile, Marco Di Ciano, Pasquale Lops: AI-based decision support system for public procurement. Inf. Syst. 119: 102284 (2023)
- Lucia Siciliani, Pierpaolo Basile, Pasquale Lops, Giovanni Semeraro: MQALD: Evaluating the impact of modifiers in question answering over knowledge graphs. Semantic Web 13(2): 215-231 (2022)
- Iovine A., Lops P., Narducci F., de Gemmis M., Semeraro G. (2022). 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
- 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
- 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
- Pasquale Lops, Cataldo Musto, Fedelucio Narducci, Giovanni Semeraro: Semantics in Adaptive and Personalised Systems - Methods, Tools and Applications. Springer 2019, ISBN 978-3-030-05617-9, pp. 1-186

- Pasquale Lops, Dietmar Jannach, Cataldo Musto, Toine Bogers, Marijn Koolen: Trends in content-based recommendation - Preface to the special issue on Recommender systems based on rich item descriptions. User Model. User Adapt. Interact. 29(2): 239-249 (2019)
- 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
- Fedelucio Narducci, Pasquale Lops, Giovanni Semeraro: Power to the patients: The HealthNetsocial network. Inf. Syst. 71: 111-122 (2017)
- 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
- Piero Molino, Luca Maria Aiello, Pasquale Lops: Social Question Answering: Textual, User, and Network Features for Best Answer Prediction. ACM Trans. Inf. Syst. 35(1): 4:1-4:40 (2016)
- 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
- Li Chen, de Gemmis, Marco, Alexander Felfernig, Lops, Pasquale, Francesco Ricci, Semeraro, Giovanni (2013). Human Decision Making and Recommender Systems. ACM TRANSACTIONS ON INTERACTIVE INTELLIGENT SYSTEMS, vol. 3, p. 17:1-17:7, ISSN: 2160-6455, doi: 10.1145/2533670.2533675
- 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

BIBLIOMETRIC INDEXES

Scopus
- Citations: 4.152, H-index: 35 (reference date 30th October 2026)

Google Scholar
- Citations: 10.881, H-index: 46 (reference date 30th October 2026)

Consapevole delle sanzioni penali, nel caso di dichiarazioni non veritiere, di formazione o uso di atti falsi, richiamate dall'art. 76 del D.P.R. 445/2000, dichiaro, altresì, di essere informato che I dati personali raccolti saranno trattati, anche con strumenti informatici, esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa e che al riguardo competono al sottoscritto tutti i diritti previsti all'art. 7 della medesima legge. Si autorizza il trattamento dei dati personali ai sensi della vigente normativa sulla privacy – D.lgs. n. 196/2003 e ss.mm.ii. ed ex articolo 13 del Regolamento Europeo 2016/679 (GDPR)

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, 30/10/2026