

PERSONAL INFORMATION

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EDUCATION

2005 Research doctorate (equivalent to Ph.D.)
Department of Computer Science and Automation,
Faculty of Engineering - Roma Tre University, Italy
Supervised by Prof. Alessandro Micarelli
Granted on 21 June 2005
2001 Laurea Degree (equivalent to Post-secondary academic degree)
Faculty of Engineering - Roma Tre University, Italy
Granted on 28 September 2001

CURRENT POSITION

2016– “Assegnista di Ricerca” (Italian Postdoctoral fellowship)
Department of Engineering - Roma Tre University
From 1 June 2016

PREVIOUS POSITIONS

2011–2016 “Ricercatore a Tempo Determinato” L.230/2005 (Research fellow)
Department of Engineering, Roma Tre University
1 February 2011 to 31 January 2016
2010–2011 “Assegnista di Ricerca” (Italian Postdoctoral fellowship)
Faculty of Engineering - Roma Tre University
1 June 2010 to 31 January 2011
2008–2010 “Assegnista di Ricerca” (Italian Postdoctoral fellowship)
Faculty of Engineering - Roma Tre University
1 February 2008 31 January 2010
2006–2008 “Assegnista di Ricerca” (Italian Postdoctoral fellowship)
Faculty of Engineering - Roma Tre University
1 February 2006 to 31 January 2008

SUPERVISION OF GRADUATE STUDENTS

2016– Doctoral Co-Advisor, Matteo Amadei
Department Engineering - Roma Tre University
2013–2016 Doctoral Co-Advisor, Davide Feltoni Gurini
Department Engineering - Roma Tre University

TEACHING ACTIVITIES

- 2010–2011 Teacher, “Fondamenti di Informatica” (Introduction to Computer Science and Programming) course - Roma Tre University
- 2009–2010 Teaching Assistant, “Fondamenti di Informatica” (Introduction to Computer Science and Programming) course - Roma Tre University
- 2007– Teaching Assistant, “Sistemi Intelligenti per Internet” (Intelligent Systems on Internet) course - Roma Tre University
- 2006–2007 Teacher, “Chief Knowledge Officer - CKO” post-graduate degree (Italian Master), Italdata, Italy
- 2002–2003 Teaching Assistant, “Calcolatori Elettronici I e II” (Computer Architecture) course, Roma Tre University
- 2001– Thesis co-advisor of near-graduate students, Faculty of Engineering - Roma Tre University

ORGANIZATION OF SCIENTIFIC MEETINGS

- 2012-2013 Local arrangements co-chair of the 21st Conference on User Modeling, Adaptation and Personalization (UMAP), Rome, Italy. June 10-14, 2013.
Key roles and responsibilities: (1) Choosing the conference venue and dates, and supporting the provisional budget of the bid, (2) Negotiating with providers, (3) Ensuring all financial, tax, and audit requirements were met, (4) Managing the Student support grants.

TECHNICAL PROGRAM COMMITTEE MEMBERSHIPS

List of program committee memberships of conferences and workshops listed in inverted chronological order.

- 2017 2nd Workshop on Semantics-Enabled Recommender Systems, New Orleans, USA. November 18 - 21, 2017
- 2017 10th International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services - CENTRIC. Athens, Greece. October 8 - 12, 2017
- 2017 1st Holistic User Modeling Workshop - HUM. Bratislava, Slovakia. July 9-12, 2017
- 2017 25th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Bratislava, Slovakia. July 9-12, 2017
- 2017 5th International Conference on Computer Science Applied Mathematics and Applications - ICCSAMA. Berlin, Germany. 30 June - 1 July, 2017
- 2017 22nd International Conference on Intelligent User Interfaces 2017, poster and demo sessions - ACM IUI. Limassol, Cyprus. 13-16 March, 2017
- 2017 3rd International Conference on Signal and Image Processing - SIPRO. Dubai, UAE. January 28-29, 2017
- 2017 International Workshop on Adaptation and Personalization in Information Systems - APIS. Porto, Portugal. April 26-29, 2017
- 2016 International Conference on Intelligent Cloud Computing - ICC. Wuhan, China. December 17-18, 2016
- 2016 Workshop on Semantics-Enabled Recommender Systems - SERecSys. Barcelona, Spain. December 12, 2016
- 2016 3rd Workshop on New Trends in Content-based Recommender Systems - CBRecSys. Boston, MA, USA. September 16, 2016
- 2016 1st Workshop on Big, Linked and Social Data for Personalized and Intelligent Systems - BLINKS. Halifax, Canada. July 13, 2016
- 2016 9th International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services - CENTRIC. Brussels, Belgium. August, 21-25, 2016
- 2016 24th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Halifax, Canada. July 13-17, 2016
- 2015 23rd Conference on User Modeling, Adaptation and Personalization - UMAP. Dublin, Ireland. June 29-July 3, 2015
- 2015 16th International Conference on Electronic Commerce and Web Technologies - EC-Web. Valencia, Spain. September 1-2, 2015
- 2015 1st International Workshop on Deep Content Analytics Techniques for Personalized and Intelligent Services - DeCAT. Dublin, Ireland. 30 June, 2015
- 2013 14th International Conference on Electronic Commerce and Web Technologies - EC-Web. Prague, Czech Republic. August 26-30, 2013
- 2012 23rd ACM conference on Hypertext and social media - ACM HT, Milwaukee, Wisconsin, U.S.A. June 25-28, 2012
- 2012 13th International Conference on Electronic Commerce and Web Technologies - EC-Web Vienna, Austria. September 3-7, 2012
- 2009-2017 International Conference on Autonomic and Autonomous Systems - ICAS
- 2008 4th International Conference on Autonomic and Autonomous Systems - Track Knowledge-based User Interface KUI. Gosier, Guadeloupe. March 16-21, 2008

DOCTORAL CONSORTIUM COMMITTEE MEMBERSHIPS

My past and current memberships of doctoral consortiums listed in inverted chronological order.

- 2017 25th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Bratislava, Slovakia. July 9-12, 2017.
- 2016 24th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Halifax, Canada. July 13-17, 2016.
- 2014 22nd Conference on User Modeling, Adaptation and Personalization - UMAP. Aalborg, Denmark. July 7-11, 2014.
- 2013 21st Conference on User Modeling, Adaptation and Personalization - UMAP. Rome, Italy. June 10-14, 2013.

EXTERNAL REFEREE FOR CONFERENCES AND WORKSHOPS

I have been invited as external referee for the following international conferences and workshops.

- 2017 20th International Workshop on the Web and Databases - WebDB, Chicago, IL, USA. May 14, 2017
- 2010 18th International Conference on User Modeling, Adaptation, and Personalization UMAP, Big Island, Hawaii, USA. June 20-24, 2010
- 2009 17th International Conference on User Modeling, Adaptation, and Personalization UMAP, Trento, Italy. June 22-26, 2009

EDITORIAL BOARD MEMBERSHIPS

I am editorial board member (or Associate editor) of the following International journals.

- 2016- Journal of Computer Science (ISSN 1549-3636)
- 2016- International Journal on Data Science and Technology (ISSN 2472-2200)
- 2011- International Journal on Advances in Intelligent Systems (ISSN 1942-2679)

And guest editor of the following special issues: [si1] (see Publications section).

INVITED REFEREE FOR JOURNAL REVIEWING

I have been invited as external referee by the the following International journals.

- 2017 International Journal of Human-Computer Studies (ISSN 1071-5819)
- 2017 IEEE Access (ISSN 2169-3536)
- 2016-2017 IEEE Transactions on Multimedia (ISSN 1520-9210)
- 2016 Information Processing and Management (ISSN 0306-4573)
- 2015 User Modeling and User-Adapted Interaction (ISSN 0924-1868)
- 2014 International Journal Distance Education Technologies (1539-3100)
- 2014 Information Processing Letters (ISSN 0020-0190)
- 2010 User Modeling and User-Adapted Interaction Special Issue Data Mining for Personalized Educational Systems (ISSN 0924-1868)
- 2009 Connection Science (ISSN 0954-0091)

INSTITUTIONAL RESPONSIBILITIES

- 2017 Member of the A.I. Task Force promoted by AgID (Agency for Digital Italy - Presidency of the Council of Ministers)
- 2012–2013 Member of the State Exam Commission responsible for the admission of graduated students to practice Engineering - Roma Tre University
- 2006– Member of Laurea degree boards at Faculty of Engineering - Roma Tre University

MAJOR INTERNATIONAL COLLABORATIONS

- 2017 Visiting Scientist at Nokia Bell Labs, Cambridge, U.K.
Host: Daniele Quercia, Luca Maria Aiello
Project: Recommender systems
from 26 July 2017.
- 2004 Visiting Researcher at the Information Science and Technologies Laboratory,
Palo Alto Research Center (PARC), Palo Alto, CA, U.S.A
Host: Ed H. Chi, Peter Pirolli and Stuard Card
Project “Theory and design of adaptable human information interaction systems for
intelligence work”, part of the R&D program “Novel Intelligence from Massive Data
(NIMD)”
My background on focused crawling the web by means Agent and Multiagent
architectures inspired the development novel techniques for providing personalized
search results to a user according to profiles for users determined by identifying
keywords, concepts or other user and/or task specific descriptors within user history
documents. A proximal neighborhood based on the user’s history and adjustable
crawling parameters includes contents of documents linked to the user history and is
exploited in the ranking process. Some of the principal outcomes have been granted
in the patent US8606781 B2.
3 September 2004 to 17 December 2004.

PATENTS

- 2013 “Systems and methods for personalized search” US8606781 B2
Inventors: Ed Chi, Fabio Gasparetti
Filed on 2005, Granted on 2013.

MAJOR PARTICIPATIONS TO FUNDED RESEARCH PROJECTS

- 2010 “KEEN - Knowledge - based Extended ENterprise”
Funding source: Italian MIUR FAR Sostegno alla ricerca industriale 2006
- 2008 “NewGenLearn - Servizi ed Applicazioni Avanzate per le-learning di Nuova Generazione”
Funding source: Italian POR Campania 2000-2006.
- 2002-2003 “DIOGENE - A Training Web Broker for ICT Professionals”
Funding source: FP5-IST (contract IST-2001-33358). Project Grant: 2,634K Euro
- 2001-2002 “M-LEARNING - Mobile Communications Technologies for Young Adults Learning and Skills Development”
Funding source: FP5-IST (contract IST-2000-25270). Project grant: 4,556K Euro

SELECTED PUBLICATIONS

All articles listed below are selected for publication by a peer review process. All the conference and workshop publications have been presented orally, by me or by my co-authors.

International Journals

- [j10] Fabio Gasparetti, Carlo De Medio, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Prerequisites between learning objects: Automatic extraction based on a machine learning approach. *Telematics and Informatics*, pages –, 2017. ISSN 0736-5853. doi: <https://doi.org/10.1016/j.tele.2017.05.007>. URL <https://doi.org/10.1016/j.tele.2017.05.007>
- [j9] Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Temporal people-to-people recommendation on social networks with sentiment-based matrix factorization. *Future Generation Computer Systems*, pages –, 2017. ISSN 0167-739X. doi: [10.1016/j.future.2017.03.020](https://doi.org/10.1016/j.future.2017.03.020). URL <http://dx.doi.org/10.1016/j.future.2017.03.020>
- [j8] Fabio Gasparetti. Personalization and context-awareness in social local search: State-of-the-art and future research challenges. *Pervasive and Mobile Computing*, pages –, 2016. ISSN 1574-1192. doi: [10.1016/j.pmcj.2016.04.004](https://doi.org/10.1016/j.pmcj.2016.04.004). URL <http://dx.doi.org/10.1016/j.pmcj.2016.04.004>
- [j7] Fabio Gasparetti. Modeling user interests from web browsing activities. *Data Mining and Knowledge Discovery*, 31(2):502–547, 2017. ISSN 1573-756X. doi: [10.1007/s10618-016-0482-x](https://doi.org/10.1007/s10618-016-0482-x). URL <http://dx.doi.org/10.1007/s10618-016-0482-x>
- [j6] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Social semantic query expansion. *ACM TIST*, 4(4):60:1–60:43, 2013. doi: [10.1145/2508037.2508041](https://doi.org/10.1145/2508037.2508041). URL <http://doi.acm.org/10.1145/2508037.2508041>
- [j5] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. An approach to social recommendation for context-aware mobile services. *ACM TIST*, 4(1):10:1–10:31, 2013. doi: [10.1145/2414425.2414435](https://doi.org/10.1145/2414425.2414435). URL <http://doi.acm.org/10.1145/2414425.2414435>
- [j4] Fabio Gasparetti, Alessandro Micarelli, and Filippo Sciarrone. A web-based training system for business letter writing. *Knowl.-Based Syst.*, 22(4):287–291, 2009. doi: [10.1016/j.knosys.2009.01.005](https://doi.org/10.1016/j.knosys.2009.01.005). URL <http://dx.doi.org/10.1016/j.knosys.2009.01.005>
- [j3] Alessandro Micarelli, Filippo Sciarrone, and Fabio Gasparetti. A case-based approach to adaptive hypermedia navigation. *IJWLTT*, 4(1):35–53, 2009. doi: [10.4018/jwltt.2009010103](https://doi.org/10.4018/jwltt.2009010103). URL <http://dx.doi.org/10.4018/jwltt.2009010103>
- [j2] Fabio Gasparetti, Alessandro Micarelli, and Filippo Sciarrone. Towards cognitive modeling of user needs in web browsing activities. *Cognitive Systems (ESSCS)*, 7:139–164, July 2009. ISSN 0256-663X
- [j1] Fabio Gasparetti and Alessandro Micarelli. Personalized search based on a memory retrieval theory. *IJPRAI*, 21(2):207–224, 2007. doi: [10.1142/S0218001407005429](https://doi.org/10.1142/S0218001407005429). URL <http://dx.doi.org/10.1142/S0218001407005429>

Book Chapters

- [b8] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A social semantic approach to adaptive query expansion. In Valérie Monfort and Karl-Heinz Krempels, editors, *Web Information Systems and Technologies: 10th International Conference, WEBIST 2014, Barcelona, Spain, April 3-5, 2014, Revised Selected Papers*, pages 113–127. Springer International Publishing, Cham, 2015. ISBN 978-3-319-27030-2. doi: [10.1007/978-3-319-27030-2_8](https://doi.org/10.1007/978-3-319-27030-2_8). URL http://dx.doi.org/10.1007/978-3-319-27030-2_8

- [b7] Alessandro Micarelli, Filippo Sciarrone, and Fabio Gasparetti. A case-based approach to adaptive hypermedia navigation. *IJWLTT*, 4(1):35–53, 2009. doi: 10.4018/jwltt.2009010103. URL <http://dx.doi.org/10.4018/jwltt.2009010103>
- [b6] Fabio Gasparetti and Alessandro Micarelli. A deep evaluation of two cognitive user models for personalized search. In Gulden Uchyigit and Matthew Y. Ma, editors, *Personalization Techniques and Recommender Systems*, volume 70 of *Series in Machine Perception and Artificial Intelligence*, pages 33–60. WorldScientific, 2008. ISBN 978-981-279-701-8. doi: 10.1142/9789812797025_0002. URL http://dx.doi.org/10.1142/9789812797025_0002
- [b5] Alessandro Micarelli and Fabio Gasparetti. Adaptive focused crawling. In Peter Brusilovsky, Alfred Kobsa, and Wolfgang Nejdl, editors, *The Adaptive Web, Methods and Strategies of Web Personalization*, volume 4321 of *Lecture Notes in Computer Science*, pages 231–262. Springer, 2007. ISBN 978-3-540-72078-2. doi: 10.1007/978-3-540-72079-9_7. URL http://dx.doi.org/10.1007/978-3-540-72079-9_7
- [b4] Alessandro Micarelli, Fabio Gasparetti, Filippo Sciarrone, and Susan Gauch. Personalized search on the world wide web. In Peter Brusilovsky, Alfred Kobsa, and Wolfgang Nejdl, editors, *The Adaptive Web, Methods and Strategies of Web Personalization*, volume 4321 of *Lecture Notes in Computer Science*, pages 195–230. Springer, 2007. ISBN 978-3-540-72078-2. doi: 10.1007/978-3-540-72079-9_6. URL http://dx.doi.org/10.1007/978-3-540-72079-9_6
- [b3] Alessandro Micarelli, Fabio Gasparetti, and Claudio Biancalana. Intelligent search on the internet. In Oliviero Stock and Marco Schaerf, editors, *Reasoning, Action and Interaction in AI Theories and Systems, Essays Dedicated to Luigia Carlucci Aiello*, volume 4155 of *Lecture Notes in Computer Science*, pages 247–264. Springer, 2006. ISBN 3-540-37901-0. doi: 10.1007/11829263_14. URL http://dx.doi.org/10.1007/11829263_14
- [b2] Fabio Gasparetti and Alessandro Micarelli. Adaptive web search based on a colony of cooperative distributed agents. In Matthias Klusch, Sascha Ossowski, Andrea Omicini, and Heimo Laamanen, editors, *Cooperative Information Agents VII, 7th International Workshop, CIA 2003, Helsinki, Finland, August 27-29, 2003, Proceedings*, volume 2782 of *Lecture Notes in Computer Science*, pages 168–183. Springer, 2003. ISBN 3-540-40798-7. doi: 10.1007/978-3-540-45217-1_13. URL http://dx.doi.org/10.1007/978-3-540-45217-1_13
- [b1] Nicola Capuano, Matteo Gaeta, Fabio Gasparetti, and Alessandro Micarelli. Holmes: A prototype for the targeted search of information about hi-tech companies. In *Second International Workshop on Intelligent Systems Design and Application*, pages 233–238, Atlanta, GA, USA, 2002. Dynamic Publishers, Inc. ISBN 0-9640398-0-X. URL <http://dl.acm.org/citation.cfm?id=774964.775002>

International Conferences

- [c24] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Matteo Lombardi, Alessandro Marani, Filippo Sciarrone, and Marco Temperini. Towards a characterization of educational material: An analysis of coursera resources. In Ting-Ting Wu, Rosella Gennari, Yueh-Min Huang, Haoran Xie, and Yiwei Cao, editors, *Emerging Technologies for Education. First International Symposium, SETE 2016, Held in Conjunction with ICWL 2016, Rome, Italy, October 26-29, 2016, Revised Selected Papers*, volume 10108 of *Lecture Notes in Computer Science*, pages 547–557. Springer International Publishing, 2017. ISBN 978-3-319-52836-6. doi: 10.1007/978-3-319-52836-6_58. URL http://dx.doi.org/10.1007/978-3-319-52836-6_58
- [c23] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Automatic extraction of prerequisites among learning objects using wikipedia-based content analysis. In Alessandro Micarelli, John C. Stamper, and Kitty Panourgia, editors, *Intelligent Tutoring Systems - 13th International Conference, ITS 2016, Zagreb, Croatia, June 7-10, 2016. Proceedings*, volume 9684 of *Lecture Notes in Computer Science*, pages 375–381. Springer, 2016.

ISBN 978-3-319-39582-1. doi: 10.1007/978-3-319-39583-8_44. URL http://dx.doi.org/10.1007/978-3-319-39583-8_44

- [c22] Dario D’Agostino, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A social context-aware recommender of itineraries between relevant points of interest. In Constantine Stephanidis, editor, *HCI International 2016 - Posters’ Extended Abstracts - 18th International Conference, HCI International 2016, Toronto, Canada, July 17-22, 2016, Proceedings, Part II*, volume 618 of *Communications in Computer and Information Science*, pages 354–359. Springer, 2016. ISBN 978-3-319-40541-4. doi: 10.1007/978-3-319-40542-1_58. URL http://dx.doi.org/10.1007/978-3-319-40542-1_58
- [c21] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Mining prerequisite relationships among learning objects. In Constantine Stephanidis, editor, *HCI International 2016 - Posters’ Extended Abstracts - 18th International Conference, HCI International 2016, Toronto, Canada, July 17-22, 2016, Proceedings, Part II*, volume 618 of *Communications in Computer and Information Science*, pages 221–225. Springer, 2016. ISBN 978-3-319-40541-4. doi: 10.1007/978-3-319-40542-1_35. URL http://dx.doi.org/10.1007/978-3-319-40542-1_35
- [c20] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Matteo Lombardi, Alessandro Marani, Filippo Sciarrone, and Marco Temperini. Discovering prerequisite relationships among learning objects: A coursera-driven approach. In Dickson K. W. Chiu, Ivana Marenzi, Umberto Nanni, Marc Spaniol, and Marco Temperini, editors, *Advances in Web-Based Learning - ICWL 2016 - 15th International Conference, Rome, Italy, October 26-29, 2016, Proceedings*, volume 10013 of *Lecture Notes in Computer Science*, pages 261–265, 2016. ISBN 978-3-319-47439-7. doi: 10.1007/978-3-319-47440-3_29. URL http://dx.doi.org/10.1007/978-3-319-47440-3_29
- [c19] Fabio Gasparetti, Carla Limongelli, Alessandra Milita, Filippo Sciarrone, and Andrea Tarantini. Sequencing wikipedia pages: An on-the-fly approach to course building. In James Ono-huome Uhomoihi, Gennaro Costagliola, Susan Zvacek, and Bruce M. McLaren, editors, *CSEDU 2016 - Proceedings of the 8th International Conference on Computer Supported Education, Volume 1, Rome, Italy, April 21-23, 2016.*, pages 397–404. SciTePress, 2016. doi: 10.5220/0005815203970404. URL <http://dx.doi.org/10.5220/0005815203970404>
- [c18] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. A machine learning approach to identify dependencies among learning objects. In James Ono-huome Uhomoihi, Gennaro Costagliola, Susan Zvacek, and Bruce M. McLaren, editors, *CSEDU 2016 - Proceedings of the 8th International Conference on Computer Supported Education, Volume 1, Rome, Italy, April 21-23, 2016.*, pages 345–352. SciTePress, 2016. doi: 10.5220/0005800503450352. URL <http://dx.doi.org/10.5220/0005800503450352>
- [c17] Michele Galli, Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Analysis of user-generated content for improving youtube video recommendation. In Pablo Castells, editor, *Poster Proceedings of the 9th ACM Conference on Recommender Systems, RecSys 2015, Vienna, Austria, September 16, 2015.*, volume 1441 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2015. URL http://ceur-ws.org/Vol-1441/recsys2015_poster3.pdf
- [c16] Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Enhancing social recommendation with sentiment communities. In Jianyong Wang, Wojciech Celary, Dingding Wang, Hua Wang, Shu-Ching Chen, Tao Li, and Yanchun Zhang, editors, *Web Information Systems Engineering - WISE 2015 - 16th International Conference, Miami, FL, USA, November 1-3, 2015, Proceedings, Part II*, volume 9419 of *Lecture Notes in Computer Science*, pages 308–315. Springer, 2015. ISBN 978-3-319-26186-7. doi: 10.1007/978-3-319-26187-4_28. URL http://dx.doi.org/10.1007/978-3-319-26187-4_28
- [c15] Fabio Gasparetti, Carla Limongelli, and Filippo Sciarrone. Exploiting wikipedia for discovering prerequisite relationships among learning objects. In *2015 International Conference on Information Technology Based Higher Education and Training, ITHET 2015, Lisbon, Portugal, June 11-13, 2015*, pages 1–6. IEEE, 2015. ISBN 978-1-4799-1756-3. doi: 10.1109/ITHET.2015.7218038. URL <http://dx.doi.org/10.1109/ITHET.2015.7218038>

- [c14] Carla Limongelli, Fabio Gasparetti, and Filippo Sciarrone. Wiki course builder: A system for retrieving and sequencing didactic materials from wikipedia. In Peter Brusilovsky, Alfred Kobsa, and Wolfgang Nejdl, editors, *2015 International Conference on Information Technology Based Higher Education and Training, ITHET 2015, Lisbon, Portugal, June 11-13, 2015*, volume 4321 of *Lecture Notes in Computer Science*, pages 1–6. Springer, 2015. ISBN 978-3-540-72078-2. doi: 10.1109/ITHET.2015.7218041. URL <http://dx.doi.org/10.1109/ITHET.2015.7218041>
- [c13] Fabio Gasparetti, Carla Limongelli, and Filippo Sciarrone. A content-based approach for supporting teachers in discovering dependency relationships between instructional units in distance learning environments. In Constantine Stephanidis, editor, *HCI International 2015 - Posters' Extended Abstracts - International Conference, HCI International 2015, Los Angeles, CA, USA, August 2-7, 2015. Proceedings, Part II*, volume 529 of *Communications in Computer and Information Science*, pages 241–246. Springer, 2015. ISBN 978-3-319-21382-8. doi: 10.1007/978-3-319-21383-5_41. URL http://dx.doi.org/10.1007/978-3-319-21383-5_41
- [c12] Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Mining navigation histories for user need recognition. In Constantine Stephanidis, editor, *HCI International 2014 - Posters' Extended Abstracts - International Conference, HCI International 2014, Heraklion, Crete, Greece, June 22-27, 2014. Proceedings, Part I*, volume 434 of *Communications in Computer and Information Science*, pages 169–173. Springer, 2014. ISBN 978-3-319-07856-4. doi: 10.1007/978-3-319-07857-1_30. URL http://dx.doi.org/10.1007/978-3-319-07857-1_30
- [c11] Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. iscur: Interest and sentiment-based community detection for user recommendation on twitter. In Vania Dimitrova, Tsvi Kuflik, David Chin, Francesco Ricci, Peter Dolog, and Geert-Jan Houben, editors, *User Modeling, Adaptation, and Personalization - 22nd International Conference, UMAP 2014, Aalborg, Denmark, July 7-11, 2014. Proceedings*, volume 8538 of *Lecture Notes in Computer Science*, pages 314–319. Springer, 2014. ISBN 978-3-319-08785-6. doi: 10.1007/978-3-319-08786-3_27. URL http://dx.doi.org/10.1007/978-3-319-08786-3_27
- [c10] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Socialsearch - A social platform for web 2.0 search. In Valérie Monfort and Karl-Heinz Krempels, editors, *WEBIST 2014 - Proceedings of the 10th International Conference on Web Information Systems and Technologies, Volume 1, Barcelona, Spain, 3-5 April, 2014*, pages 70–81. SciTePress, 2014. ISBN 978-989-758-023-9. doi: 10.5220/0004943000700081. URL <http://dx.doi.org/10.5220/0004943000700081>
- [c9] Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A general evaluation framework for adaptive focused crawlers. In Valérie Monfort and Karl-Heinz Krempels, editors, *WEBIST 2014 - Proceedings of the 10th International Conference on Web Information Systems and Technologies, Volume 2, Barcelona, Spain, 3-5 April, 2014*, pages 350–358. SciTePress, 2014. ISBN 978-989-758-024-6. doi: 10.5220/0004965903500358. URL <http://dx.doi.org/10.5220/0004965903500358>
- [c8] Giuliano Arru, Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Signal-based user recommendation on twitter. In Leslie Carr, Alberto H. F. Laender, Bernadette Farias Lóscio, Irwin King, Marcus Fontoura, Denny Vrandecic, Lora Aroyo, José Palazzo M. de Oliveira, Fernanda Lima, and Erik Wilde, editors, *22nd International World Wide Web Conference, WWW '13, Rio de Janeiro, Brazil, May 13-17, 2013, Companion Volume*, pages 941–944. International World Wide Web Conferences Steering Committee / ACM, 2013. ISBN 978-1-4503-2038-2. URL <http://dl.acm.org/citation.cfm?id=2488088>
- [c7] Davide Feltoni Gurini and Fabio Gasparetti. TREC microblog 2012 track: Real-time ranking algorithm for microblog ranking systems. In Ellen M. Voorhees and Lori P. Buckland, editors, *Proceedings of The Twenty-First Text REtrieval Conference, TREC 2012, Gaithersburg, Maryland, USA, November 6-9, 2012*, volume Special Publication 500-298. National Institute of Standards and Technology (NIST), 2012. URL http://trec.nist.gov/pubs/trec21/papers/AI_ROMA3.microblog.final.pdf
- [c6] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Enhanc-

- ing query expansion through folksonomies and semantic classes. In *2012 International Conference on Privacy, Security, Risk and Trust, PASSAT 2012, and 2012 International Conference on Social Computing, SocialCom 2012, Amsterdam, Netherlands, September 3-5, 2012*, pages 611–616. IEEE, 2012. ISBN 978-1-4673-5638-1. doi: 10.1109/SocialCom-PASSAT.2012.67. URL <http://dx.doi.org/10.1109/SocialCom-PASSAT.2012.67>
- [c5] Fabio Gasparetti, Claudio Biancalana, Alessandro Micarelli, Alfonso Miola, and Giuseppe Sansonetti. Wavelet-based music recommendation. In Karl-Heinz Krempels and José Cordeiro, editors, *WEBIST 2012 - Proceedings of the 8th International Conference on Web Information Systems and Technologies, Porto, Portugal, 18 - 21 April, 2012*, pages 399–402. SciTePress, 2012. ISBN 978-989-8565-08-2. doi: 10.5220/0003940903990402. URL <http://dx.doi.org/10.5220/0003940903990402>
- [c4] Claudio Biancalana, Andrea Flamini, Fabio Gasparetti, Alessandro Micarelli, Samuele Millevolte, and Giuseppe Sansonetti. Enhancing traditional local search recommendations with context-awareness. In Joseph A. Konstan, Ricardo Conejo, José-Luis Marzo, and Nuria Oliver, editors, *User Modeling, Adaption and Personalization - 19th International Conference, UMAP 2011, Girona, Spain, July 11-15, 2011. Proceedings*, volume 6787 of *Lecture Notes in Computer Science*, pages 335–340. Springer, 2011. ISBN 978-3-642-22361-7. doi: 10.1007/978-3-642-22362-4_29. URL http://dx.doi.org/10.1007/978-3-642-22362-4_29
- [c3] Claudio Biancalana, Fabio Gasparetti, and Alessandro Micarelli. Personalization in virtual enterprises. In Joaquim Filipe and José Cordeiro, editors, *WEBIST 2009 - Proceedings of the Fifth International Conference on Web Information Systems and Technologies, Lisbon, Portugal, March 23-26, 2009*, pages 581–584. INSTICC Press, 2009. ISBN 978-989-8111-81-4. doi: 10.5220/0001842905810584. URL <http://dx.doi.org/10.5220/0001842905810584>
- [c2] Fabio Gasparetti and Alessandro Micarelli. Exploiting web browsing histories to identify user needs. In David N. Chin, Michelle X. Zhou, Tessa A. Lau, and Angel R. Puerta, editors, *Proceedings of the 12th International Conference on Intelligent User Interfaces, IUI 2007, Honolulu, Hawaii, USA, January 28-31, 2007*, pages 325–328. ACM, 2007. ISBN 1-59593-481-2. doi: 10.1145/1216295.1216358. URL <http://doi.acm.org/10.1145/1216295.1216358>
- [c1] Fabio Gasparetti and Alessandro Micarelli. Swarm intelligence: Agents for adaptive web search. In Ramon López de Mántaras and Lorenza Saitta, editors, *Proceedings of the 16th European Conference on Artificial Intelligence, ECAI'2004, including Prestigious Applicants of Intelligent Systems, PAIS 2004, Valencia, Spain, August 22-27, 2004*, pages 1019–1020. IOS Press, 2004. ISBN 1-58603-452-9

International Workshops

- [w9] Alessio De Angelis, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A social cultural recommender based on linked open data. In *Adjunct Publication of the 25th Conference on User Modeling, Adaptation and Personalization, UMAP '17*, pages 329–332, New York, NY, USA, 2017. ACM. ISBN 978-1-4503-5067-9. doi: 10.1145/3099023.3099092. URL <http://doi.acm.org/10.1145/3099023.3099092>
- [w8] Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Course-driven teacher modeling for learning objects recommendation in the moodle lms. In *Adjunct Publication of the 25th Conference on User Modeling, Adaptation and Personalization, UMAP '17*, pages 141–145, New York, NY, USA, 2017. ACM. ISBN 978-1-4503-5067-9. doi: 10.1145/3099023.3099037. URL <http://doi.acm.org/10.1145/3099023.3099037>
- [w7] Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Analysis of sentiment communities in online networks. In Christoph Trattner, Denis Parra, Peter Brusilovsky, and Leandro Balby Marinho, editors, *Proceedings of the International Workshop on Social Personalisation & Search, SPS 2015, co-located with the 38th Annual ACM SIGIR Conference (SIGIR 2015), Santiago de Chile, Chile, August 9-13, 2015.*, volume 1421 of *CEUR Work-*

- shop Proceedings*, pages 17–20. CEUR-WS.org, 2015. URL <http://ceur-ws.org/Vol-1421/paper4.pdf>
- [w6] Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A sentiment-based approach to twitter user recommendation. In Bamshad Mobasher, Dietmar Jannach, Werner Geyer, Jill Freyne, Andreas Hotho, Sarabjot Singh Anand, and Ido Guy, editors, *Proceedings of the Fifth ACM RecSys Workshop on Recommender Systems and the Social Web co-located with the 7th ACM Conference on Recommender Systems (RecSys 2013), Hong Kong, China, October 13, 2013.*, volume 1066 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2013. URL <http://ceur-ws.org/Vol-1066/Paper5.pdf>
- [w5] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, Alfonso Miola, and Giuseppe Sansonetti. Folksonomy-based adaptive query expansion. In Eelco Herder, Kalina Yacef, Li Chen, and Stephan Weibelzahl, editors, *Workshop and Poster Proceedings of the 20th Conference on User Modeling, Adaptation, and Personalization, Montreal, Canada, July 16-20, 2012*, volume 872 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2012. URL http://ceur-ws.org/Vol-872/srs2012_paper_1.pdf
- [w4] Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, Alfonso Miola, and Giuseppe Sansonetti. Context-aware movie recommendation based on signal processing and machine learning. In *Proceedings of the 2Nd Challenge on Context-Aware Movie Recommendation, CAMRa '11*, pages 5–10, New York, NY, USA, 2011. ACM. ISBN 978-1-4503-0825-0. doi: 10.1145/2096112.2096114. URL <http://doi.acm.org/10.1145/2096112.2096114>
- [w3] Alfredo Di Napoli, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. A step toward personalized social geotagging. In *Proceedings of IUI 2010 Workshop on Social Recommender Systems*, 2011
- [w2] Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Towards modeling of information needs in web-browsing activities. In *Proceedings of the 25th Annual Workshop of European Society for the Study of Cognitive Systems*, 2008
- [w1] Fabio Gasparetti, Universit Degli Studi, and Alessandro Micarelli. User profile generation based on a memory retrieval theory. In *in Proceedings of the 1st International Workshop on Web Personalization, Recommender Systems and Intelligent User Interfaces, WPRSIUI 2005*, pages 3–7, 2005

Invited Talks

- [i2] Fabio Gasparetti. Improving News Recommendation by Monitoring the Perception of News Content on Social Networks: A Methodology. Workshop of the Israel Science Foundation on: User Modeling and Recommender Systems, organized by Tsvi Kuflik. Haifa, Israel, 17-19 July, 2017. Invited Talk
- [i1] Fabio Gasparetti. Exploring folksonomies for adaptive query expansion. SASWeb 2012: Semantic and Adaptive Social Web workshop, organized by Lora Aroyo, Federica Cena, Antonina Dattolo, Pasquale Lops, Julita Vassileva. In conjunction with the 20th Conference on User Modeling, Adaptation, and Personalization. Montreal, Canada, 16-20 July, 2012. Invited Talk

Contributions to Encyclopedias

- [e1] Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Community detection and recommender systems. In Reda Alhajj and Jon Rokne, editors, *Encyclopedia of Social Network Analysis and Mining*, pages 1–14. Springer New York, New York, NY, 2017. ISBN 978-1-4614-7163-9. doi: 10.1007/978-1-4614-7163-9_110160-1. URL https://doi.org/10.1007/978-1-4614-7163-9_110160-1

Guest editor of Special Issues

- [si1] Federica Cena, Fabio Gasparetti, Damianos Gavalas, Shuk Ying Ho, Bin Liu, and Dingqi Yang (eds). *Special issue on Advances in Personalized Mobile Services - Journal of Mobile Information Systems*, volume -. Hindawi, - 2018. URL <https://www.hindawi.com/journals/misy/si/703961/cfp/>. (lead guest editor: Fabio Gasparetti; Special Issue by invitation)

The principal achievements of the track record are summarized as follows:

- Over 640 citations, H-index 12 (source: Google scholar)
- Five publications on Top-ranked international journals (Q1 according to Scimago Journal rankings), two of them are single-authored.
- Track record with significant achievements in multiple domains, e.g., Intelligent Tutoring Systems, Recommender Systems, User modeling and user-adapted interaction.
- In [j4] my colleagues and I propose the first prototype of assistive writing technology based on the constructivism theory and self-directed learning paradigms.
- In [j5] my colleagues and I propose the first approach in the literature that combines user profiling, context-awareness and social signals in a recommender system of points of interest.
- I am one the authors of the book “The Adaptive Web Methods and Strategies of Web Personalization” (ISBN 3540720782), a comprehensive collection of chapters that map out the most important areas of the adaptive Web.
- The survey [b4] received 227 citations and is considered one of the first contributions that covers the personalization of Information Retrieval search tools on the Web.
- The survey [b5] is the first attempt to systematically illustrate the benefits of the adaptivity to environment and user needs alterations in focused crawling.
- I am one of the contributors to the 2nd edition of Encyclopedia of Social Network Analysis and Mining (ESNAM) with the entry [e1].
- Several conference contributions are in well-established international conferences, such as, Intelligent Tutoring Systems (ITS), Intelligent User Interfaces (IUI), User Modeling, Adaption and Personalization (UMAP) and World Wide Web (WWW).
- 13 of 55 publications are without my Ph.D. supervisor.
- In 2013 I started co-supervising Davide Feltoni Gurini in his PhD. Social network analysis, which began one of principal research interests. The principal outcomes of this research are: (1) Community detection algorithms based on Sentiment and Opinion analysis, (2) Recommender systems based on Signal-based representations of the user interests. They were recognized by the research community as very original approaches to the respective problems.
- My current research activity deal with an Adaptive focused crawler for social networks, able to access and autonomously retrieve relevant information by means of the traditional Streaming API provided by Twitter.