

Curriculum Vitae et Studiorum

Alberto Montresor

1 Gennaio 2026

1 Introduzione

Posizione attuale

2020- Professore ordinario per il settore disciplinare INF/01 presso il Dip. di Ingegneria e Scienza dell'Informazione dell'Università di Trento.

Esperienze accademiche

2005-2020 Professore associato per il settore disciplinare INF/01 presso il Dip. di Ingegneria e Scienza dell'Informazione dell'Università di Trento.

2002-2005 Ricercatore per il settore disciplinare INF/01 presso il Dip. di Scienze dell'Informazione dell'Università di Bologna.

2002 Titolare di un contratto di collaborazione presso l'Università di Bologna, finanziato dal progetto europeo ADAPT.

2000-2002 Titolare di un assegno di ricerca presso l'Università di Bologna, finanziato in parte dal Ministero dell'Università e della Ricerca Scientifica e in parte da Sun Microsystems.

1998 Visiting researcher presso il Dip. di Informatica dell'Università di Twente (Enschede, Olanda), su invito del prof. Sape Mullender.

Titoli

2018 Abilitazione Scientifica Nazionale, settore concorsuale 09/H1, Prima fascia

2014 Abilitazione Scientifica Nazionale, settore concorsuale 01/B1, Prima fascia

1995-2000 Dottorato in Informatica presso l'Università di Bologna.

1990-1995 Laurea in Scienze dell'Informazione presso l'Università di Bologna, con la votazione 110/110 e lode.

1985-1990 Maturità Scientifica presso il Liceo Scientifico G. Fracastoro di Verona, con il punteggio 58/60.

2 Ricerca

Durante il dottorato, sotto la supervisione del Prof. Babaoglu, e negli anni immediatamente successivi (1996-2001), la mia ricerca si è concentrata sui sistemi distribuiti e sulla fault-tolerance, con particolare attenzione ai sistemi di group communication in ambienti partizionabili. Ho studiato e implementato meccanismi per garantire un'alta disponibilità tramite replicazione, definendo specifiche per il group membership service (GMS) e il reliable multicast service (RMS), che assicurano la coerenza tra i membri di un gruppo e la consegna affidabile dei messaggi. In questo contesto, ho sviluppato Jgroup, un sistema di group communication esteso per Java RMI.

Dal 2002 al 2015, la mia ricerca si è focalizzata sui protocolli epidemici, applicati ai sistemi peer-to-peer (P2P) per migliorarne scalabilità e robustezza. Ho sviluppato soluzioni per problemi chiave come aggregation, load balancing, ranking decentralizzato e costruzione di topologie distribuite. Gran parte di questi studi sono stati implementati e valutati attraverso Peersim, un simulatore di reti P2P che ho progettato insieme a Mark Jelasity (Hungarian Academy of Science e University of Szeged) a partire dal 2003, durante il mio periodo a Bologna. Nel tempo, Peersim è diventato uno strumento di riferimento nella comunità di ricerca: a gennaio 2025, è stato scaricato 40.000 volte ed è stato utilizzato in oltre 1.200 pubblicazioni.

Dal 2010 a oggi, la mia ricerca si è progressivamente concentrata sullo sviluppo di algoritmi centralizzati e distribuiti per l'analisi di grafi di grandi dimensioni, affrontando problemi come la decomposizione strutturale, l'estrazione di comunità e il ranking decentralizzato. Ho lavorato su reti multilivello e ipergrafi, sviluppando misure per reti multiplex e metodi efficienti per l'identificazione di motivi ricorrenti in grandi ipergrafi.

Negli ultimi anni, la mia ricerca si è estesa all'ambito della Computer Science Education, con un focus su strategie didattiche innovative per l'insegnamento dell'informatica, del pensiero computazionale e della programmazione, nonché su metodologie per favorirne l'integrazione sostenibile nell'educazione primaria e secondaria. Per affrontare questa sfida, ho ampliato il mio lavoro a discipline come psicologia e pedagogia, contribuendo con pubblicazioni di rilievo anche in questi settori.

Dati statistici

- 4 libri di testo per l'università e le scuole superiori
- 11 pubblicazioni di atti come editor
- 36 articoli su rivista
- 2 capitoli di libri
- 93 articoli in atti di conferenza

Database	H-index	# Citations	Top paper
Google Scholar	44	9652	1255
Scopus	28	4613	835

Riconoscimenti

- 2018** Z. T. Kefato, N. Sheikh, L. Bahri, A. Soliman, A. Montresor, and S. Girdzijauskas. CAS2VEC: network-agnostic cascade prediction in online social networks. In Proc. of the 5th International Conference on Social Networks Analysis, Management and Security (SNAMS 2018), pages 72–79. IEEE, October 2018.
- 2011** A. Montresor and L. Abeni. Cloudy weather for P2P, with a chance of gossip. In Proc. of the 11th IEEE P2P Conference on Peer-to-Peer Computing (P2P'11), pages 250-259. IEEE, August 2011.
- 2006** G. P. Jesi, A. Montresor, and O. Babaoglu. Proximity-aware superpeer overlay topologies. In Proc. of SelfMan'06, LNCS 3996, pages 43-57. Springer-Verlag, Dublin, Ireland, June 2006.

3 Finanziamenti

Title	Year	Agency & Type	Role	Own Budget	Total Amount
VIPPSTAR	2025	Horizon	Member	166.200€	
Sparkle	2025	Repubblica Digitale	Member	42.525€	
Smaca	2024	Euregio	Member	4.900€	
Minerva	2023-2025	FSE	Member	30.100€	
Learning Informatics	2023-2026	MUR Prin	Coordinator	46.730€	214.388€
Progetto Lauree Scientifiche	2023	MUR	Local unit coord.	30.000€	
Cloudstars	2023-2026	MUR	Member	86.000€	
STEM Kit	2021	MUR	Coordinator	56.000€	100.000
Computational Thinking Academy	2021	Erasmus+	Local unit coord.	56.227€	
Progetto Lauree Scientifiche	2021	MUR	Local unit coord.	20.000€	
Progetto Lauree Scientifiche	2019	MUR	Local unit coord.	22.000€	
Conto Terzi Grant	2019	U-Hopper	Coordinator	45.000€	45.000€
Progetto CLIC	2018	PAT	Member	12.500€	
Sensemaking Service – Entity Linking for Big Linked Data	2017	EIT ICTLabs Activity	Local unit coord.	55.000€	
Sensemaking Service – Entity Linking for Big Linked Data	2016	EIT ICTLabs Activity	Local unit coord.	50.000€	
Conto Terzi Grant	2015	SpazioDati	Coordinator	20.000€	20.000€
Large Scale Graph Proc.for Big Linked Data Analytics	2014	EIT ICTLabs Activity	Local unit coord.	60.000€	
Europa	2013	EIT ICTLabs Activity	Local unit coord.	29.000€	
Europa	2012	EIT ICTLabs Activity	Local unit coord.	32.000€	
Autonomic Security	2010-2102	MIUR PRIN	Project coord.	48.370€	201.000€
ATLAS	2007-2011	Atlantis Double-Degree Project	Project coord.	146.000€	408.000€
“Gossip-based Strategies in Global Optimization”	2008	ESA - Ariadna Project	Local unit coord.	29.000€	
Total				1.067.522€	

4 Didattica

Incarichi didattici

2005-	“Algoritmi e Strutture Dati”, C.d.L. in Informatica, Univ. of Trento
2020-2023	“Laboratory of Computer Science Education”, C.d.L. Magistrale in Informatica, Univ. of Trento.
2006-2021	“Distributed Systems”, C.d.L. Magistrale in Informatica, Univ. of Trento.
2016-2019	“Scientific Programming”, C.d.L. Magistrale in Computat. and Quantitative Biology, Univ. of Trento and C.d.L. Magistrale in Data Science, Univ. of Trento
2008,2010	“P2P Systems”, Doctorate School in ICT, Univ. of Trento (in collaboration with Renato Lo Cigno)
2002-2005	“Sistemi Operativi MZ”, C.d.L. in Informatica, Università di Bologna.
2002-2005	“Laboratorio di Sistemi Operativi MZ”, C.d.L. in Informatica, Università di Bologna.
2003-2005	“Laboratorio di Elementi di Informatica AL”, C.d.L. in Biotecnologie, Università di Bologna.

Altri corsi

2024-	“Informatica per l’Apprendimento”, Percorso 60-CFU, Univ. of Trento
2024-	“Didattica dell’Informatica e Fondamenti della Disciplina”, Percorso 60-CFU classe A-41, Univ. of Trento
2024-	“Didattica degli Algoritmi”, Percorso 60-CFU classe A-41, Univ. of Trento
2017-2019	“Laboratorio di Pensiero Computazionale”, in Percorsi di aggiornamento ”Lo studio della mente e l’arte di insegnare”, Univ. of Trento.
2017	”Computational thinking”, in Corso di Perfezionamento in ”Tecnologia per l’Educazione: Dispositivi e Diversità”, Univ. of Trento.
2003-2005	“Sicurezza nei Sistemi Operativi”, Master Almaweb in Sicurezza dei Sistemi Informativi.
2003-2004	“Sistemi Operativi”, Progetto A3 (Ambiente Accessibile d’Apprendimento), Università di Bologna.
2001-2005	“Tecnologie e Servizi Internet / Programmazione Web” (Laboratory Course), Master Almaweb in Comunicazione e Tecnologie della Comunicazione / Tecnologie Web per le Imprese.

Supporto alla didattica

2001-2002	“Laboratorio di Sistemi Operativi”, C.d.L. in Informatica, Università di Bologna.
2000-2002	“Architetture degli Elaboratori”, C.d.L. in Informatica, Università di Bologna.
2000-2005	“Sistemi Complessi Adattivi”, C.d.L. in Informatica, Università di Bologna.
1997-1999	“Sistemi 1”, C.d.L. in Informatica, Università di Bologna.

Supervisione di tesi

2005-	At the Univ. of Trento, he supervised and co-supervised 184 B.Sc. theses and 71 M.Sc. theses
2002-2005	At the University of Bologna, he supervised and co-supervised 13 B.Sc. theses and 17 M.Sc. theses
2006-2010	Ph.D. Supervision, Marco Biazzi, Senior Business Analyst at Amadeus IT Group (France)
2008-2013	Ph.D. Co-supervision, Giuliano Mega, Project Lead @ Logos Storage
2009-2013	Ph.D. Supervision, Hanna Kavalionak, post-doc at CNR - Pisa (Italy)
2011-2015	Ph.D. Supervision, Alessio Guerrieri, Data Engineer at AcademicLabs (Belgium)
2014-2019	Ph.D. Supervision, Zekarias Kefato, senior AI scientist at AstraZeneca (UK)
2016-2019	Ph.D. Supervision, Nasrullah Sheikh, IBM - Almaden (USA)
2014-2019	Ph.D. Supervision, Cristian Consonni, JRC (EC Joint Research Centre)
2019-2023	Ph.D. Co-supervision, Francesca Fiore, post-doc at Università di Trento (Italy)
2021-2025	Ph.D. Supervision, Francesco Lotito, post-doc at University of Wien (Austria)
2023-	Ph.D. Supervision, Giulia Paludo
2024-	Ph.D. Supervision, Marta Valentini
2024-	Ph.D. Supervision, David Martin Zikovitz

5 Attività professionali

Incarichi organizzativi

2024-	Prorettore per la Terza Missione e i Rapporti con le Scuole, Università di Trento
2021-	Membro del Senato Accademico, University of Trento
2022-	Coordinatore del Centro di Ateneo per la Formazione Insegnanti (FIRS), Università di Trento
2022-	Membro del Comitato Guida del Piano Strategico, Università di Trento
2021-	Membro del Comitato Scientifico e di Coordinamento del Teaching and Learning Center (FormID), Università di Trento
2020-	Coordinatore Scientifico del FabLab UniTrento
2022-2024	Delegato del Rettore per la Terza Missione, Università di Trento
2019-2022	Delegato del Rettore per i Servizi ICT, Università di Trento
2018-2022	Delegato per i Rapporti con la Scuola, Dip. di Ingegneria e Scienza dell'Informazione, Università di Trento
2015-2018	Delegato per le Relazioni con il Centro Linguistico di Ateneo, Dip. di Ingegneria e Scienza dell'Informazione, Università di Trento
2012-2015	Coordinatore della Didattica, Dip. di Ingegneria e Scienza dell'Informazione, Università di Trento

- 2010-2013** Membro del Nucleo di Valutazione, Università di Trento
- 2007-2012** Coordinatore del Progetto ATLAS, Doppio Titolo in Informatica in cooperazione con Georgia Institute of Technology, Technische Universität München
- 2009-2012** Delegato per l'orientamento, Facoltà di Scienze, Università di Trento
- 2009-2012** Delegato per la disabilità, Facoltà di Scienze, Università di Trento
- 2006-2009** Coordinatore del Consiglio d'Area Didattica in Informatica, Facoltà di Scienze, Università di Trento

Comitati editoriali

- 2011-2020** Associate Editor, Springer Computing Journal.

Numeri speciali su rivista

- 2012** Extreme Distributed Systems, Springer Computing Journal.

Membro dello Steering Committee

- 2007-2009** Int. Conf. on Distributed Systems and Interoperable Applications (DAIS).
- 2007-2013** Int. Conf. on P2P Computing (P2P). Since October 2010, steering committee chair.
- 2026**] Int. Conf. on Constructionism.

General chair

- 2020** 1st Int. Workshop on Distributed Infrastructure for Common Good ([DICG'20](#)).
- 2018** 12th Int. Conf. on Peer-to-Peer Computing ([SASO'18](#)).
- 2007** 7th Int. Conf. on Self-Adaptive and Self-Organizing Systems ([P2P'07](#)).

Programme committee chair

- 2016** 1st Workshop on Edge Computing ([WEC'16](#))
- 2009** 3rd Int. Conf. on Self-Adaptive and Self-Organizing Systems ([SASO'09](#)), Program Co-Chair.
- 2008** Distributed Objects, Middleware, and Applications (DOA'08), Program Co-Chair.
- 2006** 6th Int. Conf. on Peer-to-Peer Computing ([P2P'06](#)), Program Co-Chair.
- 2006** 6th Int. Conf. on Distributed Systems and Interoperable Applications ([DAIS'06](#)), Program Co-Chair.
- 2004** Int. Workshop on Self-* Properties in Complex Information Systems ([SelfStar'04](#)), Program Co-Chair.

Track chair

- 2018** Distributed Systems and Algorithms Topic, [EuroPar 2018](#), Topic Co-Chair.
- 2014** Social Networks, Crowdsourcing, and P2P systems Track, ICDCS'14, Track Chair
- 2012** Peer-to-Peer Computing Topic, [EuroPar 2012](#), Topic Co-Chair.
- 2011** Peer-to-Peer Computing Topic, [EuroPar 2011](#), Topic Co-Chair.
- 2008** Peer-to-Peer Computing Topic, [EuroPar 2008](#), Vice Co-Chair.
- 2007** Peer-to-Peer Computing Topic, [EuroPar 2007](#), Topic Co-Chair.

Finance chair

- 2013** 13th Int. Conf. on Peer-to-Peer Computing ([P2P'13](#)), Trento, Italy
- 2008** 2nd Int. Conf. on Self-Adaptive and Self-Organizing Systems ([SASO'08](#)), Venice, Italy.

Attività di organizzazione

- 2002-2004** Bertinoro Int. Summer School, Bertinoro (Forlì), Italy
- 2002** 7th Cabernet Radicals Workshop, Bertinoro (Forlì), Italy.
- 2002** 1st Int. Workshop on Future Directions in Distributed Computing, Bertinoro, Italy.
- 2001** 4th European Research Seminar on Advances in Dist. Comp. Systems (ERSADS'01), Bertinoro, Italy,
- 1996** 10th Int. Workshop on Distributed Algorithms (WDAG'96), Bologna, Italy.

Attività di revisione per riviste

ACM Computing Survey, IEEE Trans. on Parallel and Distributed Systems, IEEE Trans. on Computers, IEEE Trans. on Computer Communication, IEEE Trans. on Computer Networks, IEEE Trans. on Knowledge Engineering, IEEE Trans. on Network and Service Management, IEEE Trans. on Dependable and Secure Computing, IEEE Trans. on Autonomous and Adaptive Systems, IEEE Trans. on Systems, Man, and Cybernetics, IEEE Journal on Selected Areas in Communications, IEEE Internet Computing, Elsevier Journal of Parallel and Distributed Computing, Elsevier Distributed Computing, Elsevier Computer Networks, Elsevier Journal of Network and Computer Applications, Springer Swarm Intelligence. Springer Peer-to-Peer Networking and Applications, Wiley Concurrency and Computation: Practice and Experience, Oxford Computer Journal, IOP Distributed Systems Engineering,

Attività di revisione di progetto

- 2016** External Reviewer, Swiss National Science Foundation, Switzerland
- 2014,2015** External Reviewer, Qatar National Research Fund, Qatar.
- 2013** External Reviewer, Swedish Knowledge Foundation, Sweden.
- 2010** External reviewer, ERC Advanced Grant 3rd Call - 2010.
- 2009,2010** External reviewer, Nanyang Technological University, Singapore.

- 2006 External reviewer, Nordunet3 Research Programme in network research.
- 2004 External reviewer, Swedish Research Council.

Servizio in commissioni di dottorato

- 2020 Abhishek Singh, invitato da Roman Vitenberg, University of Oslo, Norway
- 2018 Lucas L. Provensi, invitato da Frank Eliassen, University of Oslo, Norway
- 2016 Istvan Hegedus, invitato da Mark Jelasity, University of Szeged, Hungary
- 2016 Tommaso Pirini, invitato da Claudio Sartori, Università di Bologna, Italy
- 2015 Ruma Paul, invitato da Vladimir Vassov, KTH, Sweden
- 2013 Roberto Roverso, invitato da Seif Haridi, KTH, Sweden
- 2013 Tallat Shafaat, invitato da Seif Haridi, KTH, Sweden
- 2013 Paal Evensen, invitato da Hein Meling, University of Stavanger, Norway
- 2013 Rajesh Sharma, invitato da Anwitaman Datta, Nanyang Technological University, Singapore
- 2012 Jan Mark Wams, invitato da Maarten van Steen, VU University Amsterdam, The Netherlands
- 2011 Amir Payberah, invitato da Seif Haridi, KTH, Sweden.
- 2011 Rameez Rahman, invitato da Henk Sips, Delft University of Technology, The Netherlands
- 2010 Kovendhan Ponnaivaikko, invitato da J. Dharanipragada, IIT Madras, India.
- 2009 Bartosz Biskupski, invitato da Renè Meier, Trinity College, Dublin, Ireland.
- 2009 Marc Sanchez, invitato da Pedro Garcia Lopez, Univ. Pompeu Fabra, Spain.
- 2008 Roman Schmidt, invitato da Karl Aberer, EPFL, Switzerland.

6 Keynote Speaker

- 2012 “Designing extreme distributed systems: challenges and opportunities”. Comparch 2012, Bertinoro, Italy.
- 2010 “Cloudy Weather for P2P, with a Chance of Gossip”. Brazilian Symposium on Computer Networks and Distributed Systems (SBRC), Gramado, Brasil, 2010.
- 2008 “Intelligent Gossip”. 2nd International Symposium on Intelligent Distributed Computing (IDC 2008), Catania, Italy.

7 Invited talk, seminari e tutorial

- 2016 “Gossip as a framework”. Middleware 2016, December 2016, Trento, Italy.
- 2016 “Reflecting on the past, preparing for the future: from peer-to-peer to edge-centric computing”. International Conference on Distributed Computing Systems. June 2016, Nara, Japan

- 2010** “Cloudy Weather for P2P, with a Chance of Gossip”. International Workshop on Distributed Systems (IWDS). November 2010, IIT-Kanpur, India
- 2009** “Gossiping in P2P networks”. International Workshop on Distributed Systems (IWDS). December 2009, IIT-Madras, India
- 2006** “The Bootstrapping Service”. EPFL, Switzerland. Invited Seminar.
- 2005** “The Peer-to-Peer Paradigm”, GARR’05 Conference “La rete daPERTutto”, Pisa, Italy. Tutorial.
- 2004** “Computing Aggregate Functions on Large-Scale Distributed Systems”. Università di Trento, Italy. Invited seminar.
- 2004** “Computing Aggregate Functions on Large-Scale Distributed Systems”. Università di Verona, Italy. Invited seminar.
- 2003** “The Bison Project”, 1st COE Symposium on Networked Information System, Osaka, Japan. Invited talk.
- 2002** “The Jgroup Project”, University of Trondheim, Norway. Invited seminar.
- 2001** “The Jgroup Project”, Università di Roma, Italy. Invited seminar.
- 2001** “Experience with Reliable Group Communication”, ICDCS Workshop on Reliable Group Communication, Mesa, AZ. Panelist.
- 2000** Sun Laboratory at Burlington, MA. Research visit.
- 1999** Sun Laboratory at Aspen, CO, and Burlington, MA. Research visit
- 1999** “The Jgroup Distributed Object Model”. Dept. of Computer Science, University of Cambridge, UK. Invited seminar.

8 Pubblicazioni

Libri

- [1] Giorgia Bissoli, Agnese Del Zozzo, Michael Lodi, and Alberto Montresor. *Sulle orme di Milù: Guida di informatica*. Mondadori, Milano, February 2026.
- [2] Maurizio Boscaini, Alberto Montresor, and Massimiliano Masetti. *Hashtag – Corso di informatica con Python per il Liceo scientifico opzione scienze applicate – Volume 3*. Hoepli, Milano, September 2024.
- [3] Maurizio Boscaini, Alberto Montresor, and Massimiliano Masetti. *Hashtag – Corso di informatica con Python per il liceo scientifico opzione scienze applicate – Volume 2*. Hoepli, Milano, 2023.
- [4] Maurizio Boscaini, Alberto Montresor, and Massimiliano Masetti. *Hashtag – Corso di informatica con Python per il liceo scientifico opzione scienze applicate – Volume 1*. Hoepli, Milano, 2022.
- [5] Alan Bertossi and Alberto Montresor. *Algoritmi e strutture di dati - 3^a Ed.* Città Studi Edizioni, Torino, 2014.

Atti di convegni, edizione

- [1] Alberto Montresor and Pedro Garcia Lopez, editors. *Proc. of the First Workshop on Edge Computing*. IEEE, June 2016.

- [2] Alberto Montresor, Evaggelia Pitoura, Anwitaman Datta, and Spyros Voulgaris. Topic 7: Peer to peer computing. In *Proc. of the 18th Int. Conference on Parallel Processing*, volume 7484 of *EuroPar'12*, page 363. Springer, August 2012.
- [3] Pascal Felber, Olivier Beaumont, Alberto Montresor, and Amitabha Bagchi. Topic 7 - Peer-to-Peer Computing. In *Proc. of the 17th Int. Conference on Parallel Processing*, volume 6852 of *EuroPar'11*, pages 514–515, Bordeaux, France, August 2011. Springer.
- [4] Alberto Montresor, Fabrice Saffre, and Nenad Medvidovic, editors. *3rd IEEE Int. Conference on Self-Adaptive and Self-Organizing Systems (SASO'09)*, San Francisco, CA, September 2009. IEEE.
- [5] Mark Little, Alberto Montresor, and Greg Pavlik, editors. *Proc. of the 10th Int. Symposium on Distributed Objects, Middleware, and Applications (DOA'08)*, volume 5331 of *Lecture Notes in Computer Science*, Monterrey, Mexico, November 2008. Springer.
- [6] Dick H. J. Epema, Alberto Montresor, Márk Jelasity, and Josep Jorba. Topic 7 - Peer-to-Peer Computing. In *Proc. of the 14th Int. Conference on Parallel Processing*, EuroPar'08, pages 599–600, Las Palmas de Gran Canaria (Spain), August 2008. Springer.
- [7] Manfred Hauswirth, Adam Wierzbicki, Klaus Wherle, Alberto Montresor, and Nahid Shahmehri, editors. *Proc. of the 7th Int. Conference on Peer-to-Peer Computing (P2P'07)*. IEEE, September 2007.
- [8] Alberto Montresor, Fabrice Le Fessant, Dick H. J. Epema, and Spyros Voulgaris. Topic 7 - Peer-to-Peer Computing. In *Proc. of the 13th Int. Conference on Parallel Processing*, EuroPar'07, pages 477–478. Springer, August 2007.
- [9] Alberto Montresor, Adam Wierzbicki, and Nahid Shahmehri, editors. *Proc. of the 6th Int. Conference on Peer-to-Peer Computing (P2P'06)*. IEEE, September 2006.
- [10] Frank Eliassen and Alberto Montresor, editors. *Distributed Applications and Interoperable Systems: 6th IFIP WG 6.1 Int. Conference, DAIS'06*, volume 4025 of *Lecture Notes in Computer Science*. Springer-Verlag, June 2006.
- [11] Ozalp Babaoglu, Márk Jelasity, Alberto Montresor, Christof Fetzer, Stefano Leonardi, Aad van Moorsel, and Maarten van Steen, editors. *Self-Star Properties in Complex Information Systems*, volume 3460 of *Lecture Notes in Computer Science, Hot Topics*. Springer-Verlag, May 2005.

Articoli su rivista con referee

- [1] Quintino Francesco Lotito, Alberto Vendramini, Alberto Montresor, and Federico Battiston. The microscale organization of directed hypergraphs. *Communications Physics*, 9:43, 2026.
- [2] Simi Surendran, Maneesha Vinodhini Ramesh, Usha Kumari P V, and Alberto Montresor. Adaptive scheduling for multimedia and text traffic in ocean networks through queuing theory integrated reinforcement learning. *Multimedia Tools and Applications*, 85(2):84, 2026.
- [3] Giulia Paludo and Alberto Montresor. Toward a new paradigm of AI-powered programming education through metacognition. *Italian Journal of Educational Technology*, 2026.
- [4] Anita Erspamer, Giacomo Bozzo, Agnese Del Zozzo, Alberto Montresor, Giulia Paludo, and Peppino Sapia. L'informatica nell'apprendimento per competenze trasversali. *Ricercazione*, (2):181–190, 2025.
- [5] Alberto Montresor, Agnese Del Zozzo, Giulia Paludo, Francesca Fiore, and Giorgia Bissoli. Informatics and constructionism for transdisciplinary teacher training. *Q-Times – Journal of Education, Technology and Social Studies*, XVII(1):287–302, 2025.
- [6] Simi Surendran, Alberto Montresor, and Maneesha Vinodini Ramesh. A reinforcement learning approach for routing in marine communication network of fishing vessels. *SN COMPUT. SCI.*, 6(62):1–19, 2025.
- [7] Quintino Francesco Lotito, Alberto Montresor, and Federico Battiston. Multiplex measures for higher-order networks. *Applied Network Science*, 9(55), September 2024.

- [8] Sruthy Anand, Mojtaba Enayati, Dhanesh Raj, Alberto Montresor, and Maneesha Vinodini Ramesh. Internet over the ocean: A smart IoT-enabled digital ecosystem for empowering coastal fisher communities. *Technology in Society*, 79:102686, December 2024.
- [9] Quintino Francesco Lotito, Federico Musciotto, Alberto Montresor, and Federico Battiston. Hyperlink communities in higher-order networks. *J. Complex Networks*, 12(2), April 2024.
- [10] Quintino Francesco Lotito, Federico Musciotto, Federico Battiston, and Alberto Montresor. Exact and sampling methods for mining higher-order motifs in large hypergraphs. *Springer Computing*, pages 475–494, February 2024.
- [11] Quintino Francesco Lotito, Martina Contisciani, Caterina De Bacco, Leonardo Di Gaetano, Luca Gallo, Alberto Montresor, Federico Musciotto, Nicolò Ruggeri, and Federico Battiston. Hypergraphx: a library for higher-order network analysis. *Journal of Complex Networks*, 11(3), May 2023.
- [12] Simi Surendran, Maneesha V. Ramesh, Alberto Montresor, and Martin Montag. Link characterization and edge-centric predictive modelling in an ocean network. *IEEE Access*, 11:5031–5046, January 2023.
- [13] Quintino Francesco Lotito, Federico Musciotto, Alberto Montresor, and Federico Battiston. Higher-order motif analysis in hypergraphs. *Communications Physics*, 5(1):79, 2022.
- [14] Giovanni De Toni, Cristian Consonni, and Alberto Montresor. A general method for estimating the prevalence of influenza-like-symptoms with Wikipedia data. *PLoS ONE*, 16(28):e0256858, 2021.
- [15] Simi Surendran, Maneesha Vinodini Ramesh, Martin J. Montag, and Alberto Montresor. Modelling communication capability and node reorientation in offshore communication network. *Computers & Electrical Engineering*, 87, 2020.
- [16] Cristian Consonni, David Laniado, and Alberto Montresor. Cyclerank, or there and back again: Personalized relevance scores from cyclic paths on directed graphs. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 476(2241), September 2020.
- [17] Leonardo Maccari, Lorenzo Ghiro, Alessio Guerrieri, Alberto Montresor, and Renato Lo Cigno. Exact distributed load centrality computation: Algorithms, convergence, and applications to distance vector routing. *IEEE Trans. Parallel Distrib. Syst.*, 31(7):1693–1706, 2020.
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- [3] M.G. Braioni, A. Braioni, L. Girelli, M. Masconale, M. Francescon, and A. Montresor. Analisi territoriale e cartografia tematica nel monitoraggio a rischio ambientale. informazione geografica : innovazione e formazione. In *Atti IV Conferenza Nazionale ASITA*, pages 287–289, Genova, Italy, October 2000.
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9 Esperienze lavorative pre-ricerca

- 2002** Redazione scientifica dell'opera "Quattro.Zero", di Federico Tibone e compilazione dell'appendice "Quattro.Zero – Materiali per l'insegnante", su incarico di Zanichelli Editore (Bologna)
- 2002** Redazione scientifica dell'opera "A Portata di Mouse", di Federico Tibone e compilazione dell'appendice "A Portata di Mouse – Materiali per l'insegnante", su incarico di Zanichelli Editore (Bologna)
- 2001** Redazione scientifica delle opere "Computer Multimediale" di G. Russo, J. Jamrich-Parsons e D. Oja, e "Scrivere e comunicare con il computer" di G. Russo, M.L. Swangson, D.I. Barker e C.L.H. Barker, su incarico di Zanichelli Editore di Bologna.
- 2000-2002** Attività didattica per conto della Sun Microsystems Italia, su temi riguardanti Java, Java RMI, Servlet, Enterprise JavaBeans e sicurezza in Java.
- 2000** Attività didattica per due stage aziendali organizzati dalla NCH (Network Computer House) di Bologna e finanziati dalla Comunità Europea, su temi riguardanti elementi fondamentali di informatica, architettura degli elaboratori, sistemi operativi, reti informatiche, sicurezza e programmazione.
- 2000-2002** Realizzazione, in più riprese, di software per l'analisi della qualità paesaggistica, a seguito di incarichi del Dipartimento di Biologia dell'Università di Padova.

- 1998** Redazione scientifica della traduzione dell'opera "Computer Networks" di L. Peterson e B. Davie, su incarico di Norma Srl di Parma e Zanichelli Editore di Bologna.
- 1996-1997** Traduzione dall'inglese all'italiano dei capitoli 5 e 6 dell'opera "Computer Networks" di Andrew S. Tanenbaum, su incarico della Società UTET Libreria S.r.l.
- 1996** Realizzazione di un software per la gestione degli orari (lezioni e tesi di laurea), su incarico dell'Università di Venezia "Cà Foscari".
- 1992-2001** Realizzazione, in più riprese, di software di analisi della qualità delle rive relative al bacino idrografico del fiume Adige, a seguito di incarichi della Provincia di Verona, della Regione Veneto e del Dipartimento di Biologia dell'Università di Padova.
- 1991** Realizzazione di un software per l'analisi dei testi letterari, su incarico dell'Università di Venezia "Cà Foscari".

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