

Curriculum Vitae of Giacomo Cabri

1 General information

1.1 Current position

Giacomo Cabri is a **full professor** in Computer Engineering at the University of Modena and Reggio Emilia, Italy.

1.2 Education

He received the **Master degree in Computer Engineering** from the University of Bologna in July 1995, and the **PhD in Computer Engineering** from the University of Modena and Reggio Emilia in February 2000.

1.3 Affiliations

His main affiliation is the Dipartimento di Scienze Fisiche, Informatiche e Matematiche in Modena at the University of Modena and Reggio Emilia, Italy.

He is senior member of **IEEE** and IEEE Computer Society since January 2006, of IEEE Systems, Man, and Cybernetics Society since January 2007. He is member of IEEE SMC Society's Technical Committee on Distributed Intelligent Systems.

He is member of **ACM** since June 2007, senior member from 2020.

1.4 Institutional positions

He is the **Rector's delegate** for teaching since November 2019.

1.5 Past institutional positions

He was member of the **department board** of the Dipartimento di Scienze Fisiche, Informatiche e Matematiche from November 2018 to December 2022.

He was **Deputy Head** of the Dipartimento di Scienze Fisiche, Informatiche e Matematiche from November 2018 to October 2021.

He was the **coordinator** of the Computer Science degree from November 1st, 2014 to October 31st, 2019 and of the Computer Science master degree from November 1st, 2016 to October 31st, 2018.

He was the **deputy dean** of the doctoral course in ICT from January 1st, 2011 to December 2016.

He was member of the **department board** from July 1st, 2012 to October 31st, 2015.

1.6 Supervisor activities

He was supervisor of 5 **PhD students**.

He was supervisor of 6 **research contractors**.

2 Teaching activities

He teaches computer science courses at the Bachelor Degree of Computer Science, at the Master Degree of Computer Science, at the Master Degree of Medicine, at the National Army Academy. He teaches computer science courses at the ITS (Istituto Tecnico Superiore) in Modena.

In the past, he taught computer science courses at the Bachelor Degree of Computer Engineering, at the Master Degree of Computer Engineering, at the Master Degree of Science for Education.

3 Scientific activities

3.1 Research interest

The main research interests concern issues related to the distributed environments. In particular, the main focused topics are:

- Engineering of software agents;
- Autonomic computing;
- Distributed applications;
- Mobile computing.

3.2 Project leader

He was responsible of the following projects:

- 1) “Visits to cultural heritage supported by software agents” – Project founded by the University of Modena and Reggio Emilia, year 2001.
- 2) “Analysis of advanced software systems for the management of BPM and Workflow”, research contract with the company OT Professional Services, years 2005-2007.
- 3) “Tecnologie Web e tecniche di sicurezza a livello applicativo per sistemi di telegestione di impianti”, research contract with the company Ing. Ferrari s.p.a. di Modena, years 2005-2006.
- 4) “Metodologie per l’ingegneria dei sistemi software complessi: approccio ad agenti”, MUR PRIN 2006, WP leader, years 2007-2008.
- 5) “Tecnologie innovative per il supporto informatico alla medicina”, research contract with the company Eurosoft Informatica Medica di Modena, years 2007-2008.
- 6) “SI-IDEA – Sistema Integrato per l’Identificazione Elettronica degli Animali”, research contract with the company Demaplast of Piacenza, year 2008.
- 7) AWARE – “Coordination Action for Self-Awareness in Autonomic Systems”, FP7 Coordination Action, call FP7-ICT-2009-5, FP7-ICT-2009.8.9, WP leader, years 2010-2013.
- 8) “Sistema previsionale per le vendite”, research contract with the company Sailing Web of Reggio Emilia, year 2012
- 9) FOCAS – “Coordination Action for Foundation Of Collective Adaptive Systems”, FP7 Coordination Action, call FP7-ICT-2011-9, project 600572, WP leader, years 2013-2016.
- 10) “Modelli e algoritmi per lo sviluppo di strumenti di information delivery dipendenti dal contesto (AMBIT)”, cofunded by Fondazione Cassa di Risparmio di Modena in the framework of the call “Progetti di ricerca applicata per l’innovazione”, years 2014-2016.
- 11) “Studio di fattibilità per l’ottimizzazione della memoria ed il miglioramento delle performance di un applicativo Java per la gestione e analisi di documenti su server multiprocessore”, research contract with the company Doxee of Modena, year 2015.
- 12) FIRST – “virtual Factories: Interoperation suppoRting buSiness innovaTion”, H2020 RISE project, WP leader, years 2017-2020.

3.3 Project participant

He has participated to the following projects:

- 1) MOSAICO – Project of the Italian Ministry of University and Scientific Research. years 1998-1999.
- 2) GAIA – Project of the Italian Research National Council, years 2000-2001.

- 3) MUSIQUE – Project of the Italian Ministry of University and Scientific Research. years 2001-2002.
- 4) “Mobile software agents to enable access to multimedia services by mobile users and devices” – Project of the Italian Research National Council, years 2001-2002.
- 5) IS-MANET – Project of the Italian Ministry of University and Scientific Research and of the Italian Research National Council, years 2003-2005.
- 6) "Trust and law in the Information Society. Fostering and protecting trust in the market, in the institutions and in the technological infrastructure" – Project of the Italian Ministry of University and Scientific Research. years 2004-2005.
- 7) LAICA – “Laboratorio di Ambient Intelligence per una Città Amica (*Laboratory of Ambient Intelligence for a Friendly City*)” – Regional project of Emilia Romagna, years 2004-2006.
- 8) CASCADAS – European project, years 2006-2008.
- 9) ASCENS – “Autonomic Service-Component Ensembles”, Integrated Project FP7, call FP7-ICT-2009-5, years 2010-2014.
- 10) WASABI – “White-lable shop for digital intelligent assistance and human-AI collaboration in manufacturing” Horizon Europe project, Grant Agreement No. 101092176, years 2023-2026

3.4 Awards

He has received the best paper award for the following papers:

- 1) “Implementing Role-based Interactions for Internet Agents” at the conference 2003 IEEE International Symposium on Applications and the Internet (SAINT 2003).
- 2) “A Case Study in Role-based Agent Interactions” at the workshop Agent-based Computing for Enterprise Collaboration at IEEE 12th International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises (IEEE WETICE 2003).
- 3) “Supporting a territorial emergency scenario with Services and Agents: a case study comparison” at the workshop Agent-based Computing for Enterprise Collaboration at IEEE 15th International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises (IEEE WETICE 2006).
- 4) “Connecting Methodologies and Infrastructures in the Development of Agent Systems” at the workshop Agent Based Computing at the International Multiconference on Computer Science and Information Systems 2008 (IMCSIT 2008).
- 5) “A Context-aware Agent-based Approach for Deregulated Energy Market” at the track ACEC at the conference 21st IEEE WETICE 2012.
- 6) “Artificial Immune System driven evolution in Swarm Chemistry” at the conference IEEE 8th SASO 2014.
- 7) “Towards User-aware Service Composition” at the conference EAI International Conference on Nature of Computation and Communication 2016 (ICTCC 16)
- 8) “Auction-based Crossings Management” at the 5th EAI International Conference on Smart Objects and Technologies for Social Good (Goodtech)
- 9) “Combining Coordination Strategies for Autonomous Vehicles in Intersection Networks” at the 14th International Symposium on Intelligent Distributed Computing (IDC 2021)
- 10) “A Context-Aware Application to Monitor the Air Quality” at the 12th EAI International Conference on Context-Aware Systems and Applications (ICCASA 23)

3.5 Conference organization

He was member of the following **organization committees**:

- 1) CIA 2001 – Workshop on Cooperative Information Agents, Modena, Italy, September 2001.

- 2) Co-chair of the International Workshop on Web-based Infrastructures and Coordination Architectures for Collaborative Enterprises at WETICE 2002, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA, June 2002.
- 3) Organization committee of AAMAS 2002 – The Autonomous Agent and Multi Agent Systems Conference (AAMAS 2002), Bologna, July 2002.
- 4) Co-chair of the International Workshop on Agent-based Computing for Enterprise Collaboration a IEEE WETICE **2003** (Linz, Austria, June 2003), **2004** (Modena, Italy, June 2004), **2005** (Linkoping, Sweden, June 2005), **2006** (Manchester, UK, June 2006), **2007** (Paris, France, June 2007), **2008** (Roma, Italy, June 2008), **2011** (Paris, France, June 2011), **2012** (Toulouse, France, June 2012), **2013** (Hammamet, Tunisia, June 2013), **2015** (Larnaca, Cyprus, June 2015), **2016** (Paris, France, June 2016)), **2017** (Poznan, Poland, June 2017), **2018** (Paris, France, June 2018), **2019** (Capri, Italy, June 2019), **2020** (online), **2021** (Basque Coast - Bayonne, France, June 2021).
- 5) Co-chair of the Workshop Agents and E-commerce co-located with the International Conference on Electronic Commerce (ICEC 2003), Carnegie Mellon University, Pittsburgh, Pennsylvania, USA, September 2003.
- 6) Co-chair of the Workshop on Reliable and Secure Middleware at the On The Move Federated Conferences (OTM '03), Catania, Sicily, Italy, November 2003.
- 7) **General Chair** of WETICE 2004 – Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises, Università di Modena e Reggio Emilia, Italy, June 2004.
- 8) Co-chair of the Special Session on Role-Based Collaboration at the 2004 IEEE International Conference on Systems, Man & Cybernetics, The Hague, The Netherlands, October 2004.
- 9) Co-chair of the Special Session on Role-Based Collaboration at the IEEE 2006 Workshop on Distributed Intelligent Systems Collective Intelligence and its Applications, Prague, Czech Republic, June 2006.
- 10) **Steering Committee Chair** of the IEEE WETICE 2006 – Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises, Manchester, UK, June 2006.
- 11) Co-chair of the workshop Ja4Mo – Java for Mobility a PPPJ 2007, Monte de Caparica - Lisbon, Portugal, September 2007.
- 12) Co-chair of the workshop MODIES – MOBILE and DIStributed approaches in Emergency Scenarios a Pervasive Health 2008, Tampere, Finland, January 2008.
- 13) **General Chair** of the PPPJ 2008 – Principles and Practice of Programming in Java, Modena, Italy, September 2008.
- 14) Co-chair of the workshop 1st AWARENESS Workshop on Challenges in Achieving Self-Awareness in Autonomous Systems, Michigan, USA, 7th October 2011
- 15) Co-chair of the track “Agent Systems, Intelligent Computing and Applications” a AINA-2012 – 26th IEEE International Conference on Advanced Information Networking and Applications, Fukuoka, Japan, March 2012.
- 16) Co-chair of the workshop 2nd AWARENESS Workshop on Challenges in Achieving Self-Awareness in Autonomous Systems, Lyon, France, 10th September 2012
- 17) Co-chair of the track “Agents, Semantics and Intelligent Computing” a IEEE International Conference on Advanced Information Networking and Applications (AINA), **2013** (Barcelona, Spain, March 2013), **2014** (Victoria, Canada, May 13-16, 2014), **2016** (Le Régent Congress Centre, Crans-Montana, Switzerland, March 23-25, 2016).

- 18) Co-chair of the track “Integration and Collaboration Track” alla 2013 IEEE international Conference on E-Business Engineering, Coventry, UK, September 2013.
- 19) **General Co-chair** of the IEEE WETICE 2014 – Enabling Technologies: Infrastructure for Collaborative Enterprises, Parma, Italy, June 2014.
- 20) Publicity chair of the SASO 2014 - IEEE International Conferences on Self-Adaptive and Self-Organizing Systems, London, UK, September 8-12, 2014.
- 21) Co-chair of the 2nd FoCAS workshop on Collective Adaptive Systems at SASO 2014, London, UK, September, 2014
- 22) Publicity chair of the Coordination 2015 - 17th International Conference on Coordination Models and Languages, Grenoble, France, June 2-5, 2015.
- 23) Co-chair of the workshop on Distributed Adaptive Systems at ICAC 2015, Grenoble, France, July 7, 2015
- 24) Co-chair of the 3rd FoCAS workshop on Collective Adaptive Systems at SASO 2015, Boston, USA, September 21, 2015
- 25) **Program Co-chair** of the IEEE SASO 2016 - IEEE International Conferences on Self-Adaptive and Self-Organizing Systems, Augsburg, Germany, September 12-16
- 26) Publicity Co-chair of the IEEE ICAC 2016 – IEEE international Conference on Autonomic Computing, Würzburg, Germany, July 19-22
- 27) Co-chair del 3rd eCAS workshop on engineering Collective Adaptive Systems at SASO 2018, Trento, Italy, September 7 2018
- 28) Co-chair of the workshop on Key Enabling Technologies for Digital Factories (KET4DF) at CAiSE **2019** (Roma, Italy, June 4 2019), **2020** (online), **2021** (Melbourne, Australia, June 28-29)

3.6 Editor activity

Since January 2006 he is member of the editorial board of the **International Journal of Computational Intelligence Theory and Practice** (IJCITP), Serials Publications, ISSN 0973-5267.

Since 2012 he is member of the editorial board of the journal **Scalable Computing: Practice and Experience**, ISSN 1895-1767.

Dal 2013 he is member of the editorial board of the journal **EAI Endorsed Transactions on Context-Aware Systems and Applications**, ICST, Gent, Belgium, ISSN 2409-0026.

He was **guest editor** of the following journals:

- 1) **IEEE Transactions on Systems, Man and Cybernetics** Part A, special issue on Collaboration Support Systems, Volume 36, Issue 6, ISSN 1083-4427, November 2006
- 2) **Science of Computer Programming**, special issue Principles and Practice of Programming in Java 2008, Volume 76, Issue 11, Elsevier, ISSN 0167-6423, November 2011
- 3) **Science of Computer Programming**, special issue on Agent-oriented Design methods and Programming Techniques for Distributed Computing in Dynamic and Complex Environments, Volume 78, Issues 6, Elsevier, ISSN 0167-6423, June 2013
- 4) **Scalable Computing: Practice and Experience**, special issue on Enabling Technologies for Collaborations, ISSN 1895-1767, Vol. 15, No. 4, December 2014
- 5) **Scalable Computing: Practice and Experience**, special issue on Collective Adaptive Systems, ISSN 1895-1767, Vol. 16, No. 3, September 2015

- 6) **ACM Transactions on Autonomous and Adaptive Systems (TAAS)**, special issue on SASO 2016 best papers, ISSN:1556-4665, Vol. 12, No. 3, 2017
- 7) **Springer Mobile Networks and Applications (MONET)**, special issue “Context-Aware Systems and Applications (ICCASA 2016, 2017) AND Nature of Computation and Communication (ICTCC 2016, 2017)”, ISSN 1383-469X (print version), 1572-8153 (electronic version), February 2018
- 8) **IEEE Computers in Industry**, special issue “Autonomous, Context-Aware, Adaptive Digital Twins”, ISSN 0166-3615, Volume 133, December 2021

3.7 Reviewer activity

He was reviewer for the following **books**:

- 1) Software Evolution with UML and XML, Hongji Yang editor, published by Idea Group, Inc., 2004.
- 2) Software Engineering for Multi-Agent Systems IV, Alessandro Garcia, Ricardo Choren, Carlos Lucena, Alexander Romanovsky, Tom Holvoet, Paolo Giorgini editors, published by Springer, 2005.
- 3) The Handbook of Technology Management, Hossein Bidgoli editor, published by John Wiley & Sons, Inc., 2008.

He was and is reviewer for the following **international journals**:

- 1) IEEE Transactions on Mobile Computing, IEEE Computer Society.
- 2) IEEE Transactions on Systems, Man, and Cybernetics: Part C, IEEE Systems, Man, and Cybernetics Society.
- 3) IEEE Transactions on Intelligent Transportation Systems, IEEE.
- 4) ACM Transactions on Autonomous and Adaptive Systems, ACM.
- 5) ACM Computing Surveys, ACM.
- 6) ACM Transactions on Software Engineering and Methodology, ACM.
- 7) IEEE Computer Magazine, IEEE Computer Society.
- 8) IEEE Network, IEEE Communication Society.
- 9) IEEE Access, IEEE.
- 10) Software, Practice and Experience, Wiley.
- 11) Information and Software Technology, Elsevier Science.
- 12) Information Sciences, Elsevier Science.
- 13) Microprocessor and Microsystems, Elsevier Science.
- 14) Pervasive and Mobile Computing, Elsevier Science.
- 15) Electronic Commerce Research, Kluwer.
- 16) The Computer Journal, Oxford University Press per conto della British Computer Society.
- 17) Journal of Ambient Intelligence and Smart Environments, IOS Press.
- 18) Journal of Computer Systems Science and Engineering, CRL Publishing Ltd.
- 19) Scalable Computing: Practice and Experience, SWPS.
- 20) International Journal on Pervasive Computing and Communications, Troubador Publishing Ltd.
- 21) Applied Sciences, MDPI.
- 22) Sensors, MDPI.

23) Energy Reports, Elsevier.

He was and is reviewer for several **international conferences**.

He was reviewer for the following **project call**:

- 1) The Netherlands Organisation for Scientific Research (NWO), research grant 2010.
- 2) Futuro in Ricerca 2010, call FIRB of Italian MiUR.
- 3) PRIN 2010-2011, call of Italian MiUR.
- 4) Call Start Cup Veneto 2014, of Università di Padova, Venezia Ca' Foscari and Verona.
- 5) Call Regione Puglia “Titolo II - Aiuti a finalità regionale” pubblicato in data 14/05/2016 sul Bollettino Ufficiale della Regione Puglia n. 68
- 6) Call OC-2018-1 of COST Association (European Cooperation in Science & Technology), 2018.

4 Publications

He has published 12 chapters of scientific books, 49 international journal papers, 136 international conference/workshop papers.

His Google Scholar H-index is 31, i10-index is 100; his Scopus H-index is 23.

Modena, July 4th, 2025

Prof.  Cabri