

Curriculum Vitae and List of Publications

Giuseppe Liotta

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Brief Biography

Giuseppe Liotta is a professor of computer science at the Faculty of Engineering of the University of Perugia, where he currently serves as rector delegate (deputy chancellor) for ICT, information systems, and the digital agenda.

His research interests are mainly directed at the analysis and design of algorithms and systems that have applications in the fields information visualization and visual analytics, computational geometry, network analysis and graph drawing. On these topics he edited special issues, wrote book chapters and surveys, published more than 200 research papers, and gave lectures worldwide. He is the editor in chief of the Journal of Graph Algorithms and Applications. Giuseppe regularly serves as PC member of international conferences and he has been general co-chair of ACM SoCG 2005, GD 2003, and EuroCG 2012. From 2012 to 2018 he served as the chair-person of the Steering Committee of the International Symposium of Graph Drawing. During the years, the research of Giuseppe has been funded by several public and private sponsors.

Education

1995 : Ph.D. (Dottorato di Ricerca) in Computer Engineering, Università di Roma “La Sapienza”. Advisor: G. Di Battista. Topic: “Computing Proximity Drawings of Graphs”.

1990 : Laurea (M.Sc. Degree) in Electrical Engineering at the Università di Roma “La Sapienza”. Advisor: C. Batini. Topic: “Orthogonal Layout of Graphs”.

Professional Appointments and Institutional Services

2002- : Professor, Department of Engineering, University of Perugia.

2014- : Rector delegate (deputy chancellor) for ICT, Information Systems, and Digital Agenda, University of Perugia.

2013-2014: Vice-director, Department of Engineering, University of Perugia.

2010-2013: Member of the Academic Senate, University of Perugia.

2009-2016 : Director, Ph.D. School in Information and Communication Technology, University of Perugia.

2002-2006 : Chair of the undergraduate programs in Computer and Electrical Engineering, University of Perugia.

1998-2002 : Associate professor, Faculty of Engineering, University of Perugia, .

1996-1998 : Assistant Professor, Faculty of Engineering University of Rome “La Sapienza”.

1995-96 : Post-doc, Department of Computer Science, Brown University.

Government Review Boards

ASN Committee 09/H1, the Italian Committee for the habilitation to full professorship and associate professorship in computer engineering, member (nominated by the Italian Ministry of Education).

ESF College of Expert Reviewers, member (nominated by the European Science Foundation).

Austrian Science Fund (FWF), reviewer.

Banff International Research Station (BIRS), reviewer.

NSA Mathematical Sciences Grant Program, reviewer.

Natural Sciences and Engineering Research Council of Canada, reviewer.

Action Incitative Masse de Donnes, France, reviewer.

Steering Committee and Editorial Service

2014- : *Journal of Graph Algorithms and Applications*, editor in chief.

2012- : Steering Committee of the *International Symposium on Graph Drawing and Network Visualization*, chairperson.

2009–2010 : Editorial board of *Computing*, member.

2002–2014 : Editorial board of *Journal of Graph Algorithms and Applications*, member.

2014 : Editor of a special issues for *Computational Geometry: Theory and Applications*

2007 : Editor of a special issues for *Discrete Applied Mathematics*.

2003–2006 : Editor of conference proceedings and article collections for Springer Verlag and for World Scientific.

Research Interests

Discovery, analysis, and visualization of networks.

Graph drawing and its applications.

Algorithm engineering and system development.

Computational geometry and its applications.

Teaching

2001- : Database Management Systems (advanced undergraduate level).

2004- : Information Visualization (graduate level).

1998–2006 : Introduction to OO programming (undergraduate level).

1998–2008 : Algorithms and Data Structures (advanced undergraduate level).

2000–2001 : Introduction to Digital Systems (undergraduate level).

1996–1998 : Computer Architecture (advanced undergraduate level).

1996–1997 : Data Structures and Programming (undergraduate level).

Technology Transfer

2017- : Confidustria Umbria: Vice-president of the Digital Innovation Hub.

2009-2015: President and co-founder of *VIS4 s.r.l.*, a spin-off company of the University of Perugia in the area of algorithm engineering and information visualization. The company has been successfully sold in 2015.

Grants

2015-2018 : Italian Ministry of Research (MIUR). MIUR-Smart Cities and Communities Program, Project SCN-00166. Title of the Project: “SMARTOUR - Intelligent Platform for Tourism”. Co-principal Investigator. Budget: €309,600. (Project in collaboration with other Italian universities and companies; total budget of €12,401,341.)

2015-2017 : Italian Government, Region of Umbria. Title of the Project: “Misurare L’Agenda Digitale dell’Umbria (Evaluating the State of the Digital Agenda in Umbria)”. Principal Investigator. Budget: €50,000.

2016 : Contract of technology transfer with the company ETI3 s.r.l. Title of the Project: “Analisi, progetto e sviluppo di algoritmi e interfacce di analisi visuale di dati nell’ambito del sistema di Knowledge Discovery Piattaforma PA and B2B”, Co-principal Investigator. Budget: €35,000.

2013-2016 : Italian Ministry of Research (MIUR). MIUR-Cofin Program. Title of the Project: “AMANDA: Algorithmics for MAssive and Networked DATA”. Co-principal Investigator. Budget: €55,713. (Project in collaboration with other Italian universities; total budget of €477,537.)

2014-2015 : Italian Government, Region of Umbria. Title of the Project: “The Design of a Web Portal for Tourism in Umbria”. Principal Investigator. Budget: €50,000.

2013-2014 : Italian Government, Region of Umbria. Title of the Project: “VITA: Visualizzazione dell’Informazione e Tecnologie Assistive (Information Visualization and Assistive Technologies)”. Co-principal Investigator. Budget: €50,000. (Project in collaboration with a research unit of cognitive psychology of the University of Perugia ; total budget of €100,000.)

2011-2012 : Italian Government, Region of Umbria. Title of the Project: “TRART: Telematic Representation-Augmented Reality-Territories”, a project for smart cities and communities. Principal Investigator. Budget: €50,000.

2010-2012 : Italian Ministry of Research (MIUR). MIUR-Cofin Program. Title of the Project: “project AlgoDEEP prot. 2008TFBWL4”. Co-principal Investiga-

- tor. Budget: €20,000. (Project in collaboration with other Italian universities; total budget of about €130,000.)
- 2009–2010: Italian Government, Region of Umbria, ARPA Office. Title of the Project: “Design of visual interfaces for the Regional Environmental Software Platform”. Principal Investigator. Budget: about €35,000.
- 2009–2010 : Italian Government, Province of Perugia. Title of the Project: “A cost-benefit study for the adoption of FLOSS in the Province of Perugia”. Principal Investigator. Budget: about €22,000.
- 2009–2010: Fondazione Cassa di Risparmio di Perugia. Title of the Project: “Tal-eNet: Didattiche collaborative in rete, codice etico e problemi ermeneutici”. Investigator (in collaboration with colleagues from the Faculty of Education of the University of Perugia). Total Budget: about €60,000.
- 2008–2009: Italian Government, Region of Umbria. Collaborative Research Program FESR. Title of the Project: “COWA: COncceptual Web Analyzer”. Principal Investigator. Budget: about €65,000.
- 2006–2008 : Italian Ministry of Research (MIUR). MIUR-Cofin Program. Title of the Project: “MAINSTREAM: Algorithms for massive information structures and data streams”. Co-principal Investigator. Budget: €19,000. (Project in collaboration with other Italian universities; total budget of about €187,000.)
- 2003–2007 : European Union. EU @LIS Program ALA 2002/048-222/3124. Title of the project: “HEALT for ALL in LA: Improving Health Care Access and Management through e-Learning for Continuous Professional Development of Family Doctors in Latin America”. Co-principal Investigator. Budget: €390,000. (Project in collaboration with other European and South American universities and research centers; total budget of about €2.7M.)
- 2006–2007 : Italian Government, Umbria Region. Title of the Project: “AREA: Design of an Interactive Platform for Environmental Education in the Umbria Region”. Principal Investigator. Budget: €47,000.
- 2004–2006 : Italian Ministry of Research (MIUR). MIUR-Cofin 2004 Program. Title of the Project: “ALGO-NEXT, Algorithms for the Next Generation Internet and Web: Methodologies, Design and Experiments”. Co-principal Investigator. Budget: €17,000. (Project in collaboration with other Italian universities; total budget of about €100,000.)
- 2002–2005 : Italian Ministry of Research MIUR n. S606/Project. Title of the project: “Automatic Systems for storing and accessing DNA, Blood, and other biological materials” (“Sistemi robotizzati per la conservazione di DNA, sangue e materiali biologici”). Co-principal Investigator. Budget: €186,590. (Project is in collaboration with other Italian universities and industries; total budget of about €5.6M.)

- 2002–2004 : Italian Ministry of Research (MIUR). MIUR-Cofin 2002 Program. Title of the Project: “ALINWEB, Algorithms for the Internet and the Web”. Co-principal Investigator. Budget: €17,000. (Project in collaboration with other Italian universities; total budget of about €100,000.)
- 2002 : Angelantoni Industries, s.r.l.. Title of the project: “Database System for the HEMOSAFE Project”. Principal Investigator. Budget: €23,000.
- 2001 : Italian Government, Province of Perugia. Title of the project: “Reviewing and Testing the performances of the Intranet of the Public Administration in the Province of Perugia”. Principal Investigator. Budget: €36,000.
- 2000–2002 : Italian Ministry of Research and Education (MIUR). MIUR-Cofin 2000 Program. Project Title: “Algorithms for Large Data Sets: Science and Engineering”. Co-principal Investigator. Budget: €15,000. (Project in collaboration with other Italian universities; total budget of about €100,000.)
- 1998–2000 : Italian National Research Council (CNR). Project Title: “Robust Geometric Computing and its applications to computer graphics and CAD”. Co-principal Investigator. Budget: €12,000. (Project in collaboration with Univ. of Rome “La Sapienza” and with Univ. of Rome “Roma Tre”; total budget of about €36,000.)
- 1998–2000 : Univ.of Perugia. Project Title: “Eterogeneous Systems for Multimedia Applications” Principal Investigator. Budget: €25,000.
- 1997–1999 : Italian Ministry of Research and Education (MIUR). MIUR-Cofin 1997 Program. Project Title: “On-line Algorithms for Autonomous Agents”. Co-principal Investigator. Budget: €20,000. (Project in collaboration with other Italian universities; total budget of about €130,000.)

PC Chair and Conference Organization

- 2012 : *European Workshop on Computational Geometry, EuroCG 2012*, April 2012, program committee chair.
- 2003 : *International Symposium on Graph Drawing, GD 2003*, Sept. 2003, program committee chair.
- 2016 : *Shonan Meeting on Dynamic Networks Visual Analytics: Approaches to facilitate visual analysis of complex and dynamic network data*, co-organizer (in collaboration with Karsten Klein and Takayuki Itoh).
- 2006–2017 : *Bertinoro Workshop on Graph Drawing*, co-organizer (in collaboration with W. Didimo).
- 2015 : *Shonan Meeting on Big Graph Drawing: Metrics and Methods*, co-organizer (in collaboration with Karsten Klein and Takayuki Itoh).

2005 : *ACM Symposium on Computational Geometry, SoCG05*, June 2005, general co-chair (in collaboration with M. Pellegrini).

Recent Invited Talks

2017 : Computational Geometry Week; Workshop on Visualization and Geometric Graphs, Brisbane, Australia.

2016 : Seminar on Graph Drawing Beyond Planarity, Dagstuhl, Germany.

2014 : Workshop on solving graph, homomorphism and geometrical problems, HOMONOLO 2014, Czech Republic .

2014 : EuroGIGA Final Conference, Berlin, Germany.

2014 : 15th Italian Conference on Theoretical Computer Science, ICTCS'14, Perugia, Italy.

2012 : Workshop on Theory and Practice of Graph Drawing, Redmond, US.

2012 : 9th International Conference Computer Graphics, Imaging and Visualization, CGiV2012, Hsinchu, Taiwan.

2011 : Seminar on Graph Drawing with Algorithm Engineering Methods, Dagstuhl, Germany.

2010 : Conference on Geometric Graph Theory Lausanne, Switzerland.

2010 : University of Sydney, Australia.

2010 : Workshop on Algorithms and Complexity, WALCOM 2010, Dhaka, Bangladesh.

Program Committees

2019 : *IEEE Pacific Visualization Symposium, PacificVis 2019*, Apr. 2019, PC member.

2019 : *Workshop on Algorithms and Computation, WALCOM 2019*, Feb. 2019, PC member.

2018 : *International Workshop on Visual Analytics for Big Networks (BigNet)*, Dec. 2018, PC member.

2018 : *Symposium on Experimental Algorithms, SEA 2018*, July 2018, PC member.

2018 : *IEEE Pacific Visualization Symposium, PacificVis 2018*, Apr. 2018, PC member.

- 2018 : *Workshop on Algorithms and Computation, WALCOM 2018*, Feb. 2018, PC member.
- 2017 : *Workshop on Algorithms and Computation, WALCOM 2017*, Feb. 2017, PC member.
- 2017 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2017*, March 2017, PC member.
- 2017 : *International Conference on Health Informatics, HEALTHINF 2017*, January 2017, PC member.
- 2016 : *27th International Symposium on Algorithms and Computation, ISAAC 2016*, December 2016, PC member.
- 2016 : *International Conference on Information, Intelligence, Systems and Applications, IISA 2015*, July 2016, PC member.
- 2016 : *32nd European Workshop on Computational Geometry, EuroCG 2016*, March-April 2016, PC member.
- 2016 : *IEEE Pacific Visualization 2016 conference, PacificVis 2016*, April 2016, PC member.
- 2016 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2016*, March 2016, PC member.
- 2016 : *International Conference on Physiological Computing Systems, PhyCS 2016*, January 2016, PC member.
- 2016 : *International Conference on Health Informatics, HEALTHINF 2016*, January 2016, PC member.
- 2015 : *International Conference on Information, Intelligence, Systems and Applications, IISA 2015*, July 2015, PC member.
- 2015 : *IEEE Pacific Visualization Symposium*, March 2015, PC member.
- 2015 : *Workshop on Algorithms and Computation, WALCOM 2015*, Feb. 2015, PC member.
- 2015 : *International Conference on Health Informatics, HEALTHINF 2015*, January 2015, PC member.
- 2015 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2015*, March 2015, PC member.
- 2015 : *International Conference on Physiological Computing Systems, PhyCS 2015*, January 2015, PC member.

- 2014 : *International Conference on Information, Intelligence, Systems and Applications, IISA 2014*, July 2014, PC member.
- 2014 : *Symposium on Graph Drawing, GD 2014*, Sept. 2014, PC member.
- 2014 : *IEEE Pacific Visualization Symposium*, March 2014, PC member.
- 2014 : *Workshop on Algorithms and Computation, WALCOM 2014*, Feb. 2014, PC member.
- 2014 : *International Conference on Health Informatics, HEALTHINF 2014*, January 2014, PC member.
- 2014 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2014*, March 2014, PC member.
- 2014 : *International Conference on Physiological Computing Systems, PhyCS 2014*, January 2014, PC member.
- 2013 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2013*, March 2013, PC member.
- 2013 : *International Conference on Health Informatics, HEALTHINF 2013*, January 2013, PC member.
- 2012 : *28th European Workshop on Computational Geometry, EuroCG 2012*, March 2012, PC co-chair (with W. Didimo).
- 2012 : *Workshop on Algorithms and Computation, WALCOM 2012*, Feb. 2012, PC member.
- 2012 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2012*, March 2012, PC member.
- 2012 : *International Conference on Health Informatics, HEALTHINF 2012*, January 2012, PC member.
- 2011 : *ACM Conference on Information and Knowledge Management, CIKM 2011*. October 2011, PC member.
- 2011 : *22nd International Symposium on Algorithms and Computation, ISAAC 2011*, December 2011, PC member.
- 2011 : *International Conference on Information Visualization: Theory and Applications, IVAPP 2011*, March 2011, PC member.
- 2011 : *International Conference on Health Informatics, HEALTHINF 2011*, January 2011, PC member.
- 2010 : *Symposium on Graph Drawing, GD 2010*, Sept. 2010, PC member.

- 2010 : *IEEE Pacific Visualization Symposium*, April 2010, PC member.
- 2010 : *Workshop on Algorithms and Computation, WALCOM 2010*, Feb. 2010, PC member.
- 2009 : *Symposium on Graph Drawing, GD 2009*, Sept. 2009, PC member.
- 2009 : *Computer Graphics and Visualization, CGV2009*, July 2009, PC member.
- 2009 : *IEEE Pacific Visualization Symposium*, April 2009, PC member.
- 2008 : *19th International Symposium on Algorithms and Computation, ISAAC 2008*, Dec. 2008, PC member.
- 2008 : *Workshop on Algorithms and Computation, WALCOM 2008*, Feb. 2008, PC member.
- 2007 : *Symposium on Graph Drawing, GD 2007*, Sept. 2007, PC member.
- 2007 : *Computer Graphics and Visualization, CGV2007*, July 2007, PC member.
- 2005 : *Symposium on Graph Drawing, GD 2005*, Sept. 2005, PC member.
- 2005 : *Annual Conference on Current Trends in Theory and Practice of Informatics, SOFSEM 2005*, January 2005, PC member.
- 2004 : *European Symposium on Algorithms, ESA 2004*, Sept. 2004, PC member.
- 2004 : *Symposium on Graph Drawing, GD 2004*, Sept. 2004, PC member.
- 2003 : *Symposium on Graph Drawing, GD 2003*, Sept. 2003, PC-chair.
- 2002 : *Symposium on Graph Drawing, GD 2002*, August 2002, PC member.
- 2001 : *Workshop on Algorithms and Data Structures, WADS 2001*, August 2001, PC member.
- 2001 : *Symposium on Graph Drawing, GD 2001*, September 2001, PC member.
- 2000 : *Symposium on Graph Drawing, GD 2000*, September 2000, PC member.
- 1998 : *Symposium on Graph Drawing, GD 1998*, August 1998, PC member and organizing committee member.

Honors and Awards

- 2010 : International Visiting Research Fellowship, Australian Ministry of Education; spent three months at the Faculty of Engineering and Information Technologies of the University of Sydney.

2008 : AIP (Italian ICT Professionals) “Fibonacci Prize” for the research achievements in visual analytics in 2008.

2005 : ACM service award.

1995 : EATCS award for the best Ph.D. thesis on theoretical computer science in Italy for the years 1994 and 1995.

1994 : Advanced Fellowships Programme CNR-NATO.

1991 : Best student paper at the IEEE Workshop on Visual Languages, VL’91.

Ph.D. Advising

Current Ph.D Students

- Alessandra Tappini (M. Sc. 2016), currently a Ph.D. student working on graph drawing beyond planarity.
- Daniele Pagliuca (M. Sc. 2010), currently a Ph.D. student working on social network analysis.
- Giacomo Ortali (M.Sc. 2018), currently a Ph.D. student working on visualizations of hierarchies.

Former Ph.D Students

- Felice De Luca. Year of Ph.D.: 2018, currently a post-doc at the Arizona State University, Tucson (US).
- Alessio Arleo. Year of Ph.D.: 2018, currently a post-doc at TU Wien (Austria).
- Fabrizio Montecchiani. Year of Ph.D.: 2014, currently a post-doc at the University of Perugia.
- Salvatore A. Romeo. Year of Ph.D.: 2012, currently working as a software consultant.
- Pietro Palladino. Year of Ph.D.: 2010, currently a high school teacher and a consultant.
- Francesco Trotta. Year of Ph.D.: 2008, currently working as a Machine learning Solution Architect at AGS S.p.A. in Milan.
- Francesco Giordano. Year of Ph.D.: 2008, currently working as an Enterprise and Solution Architect at Banca Mediolanum in Milan.
- Luca Grilli. Year of Ph.D.: 2007, currently working as an assistant professor (with tenure) at the University of Perugia.

- Emilio di Giacomo. Year of Ph.D.: 2003, currently working as an associate professor at the University of Perugia.
- Carla Binucci. Year of Ph.D.: 2002, currently working as an assistant professor (with tenure) at the University of Perugia.

External Ph.D./Habilitation Committees

- Panagiotis Lionakis. PhD student at the University of Crete. Member of his supervising committee since 2018 (the committee consists of three members and will supervise the research of the student during his studies for a three years period).
- Christian Bachmaier. Habilitation Thesis, Univ. of Passau, Germany. Discussed in 2010.
- Damian Merrick. Ph.D. at Univ. of Sydney, Australia. Year of Ph.D. : 2008.
- Karol Lynch. Ph.D. at the University of Limerick, Ireland. Year of Ph.D.: 2006.
- Timothy Dwyer. Ph.D. at Univ. of Sydney, Australia. Year of Ph.D. : 2004. Now with Microsoft Research in Redmond, USA.
- Adrian Rusu. Ph.D. at Univ. of Buffalo, US. Year of Ph.D.: 2003. Now an associate professor at the Rowan University, US.

International Research Collaborations

Several colleagues from all around the world regularly visit my lab to work on research themes of common interest. Some of them stay for relatively short periods of time (7-10 days) and come to visit every few months; some others spend (part of) their sabbatical working in my research lab. I wish to thank all of my research colleagues for the many wonderful hours that we spent together and for the many ideas and techniques that I learned working with them. A limited list of the colleagues who have visited my research lab is given below. Note: the list may be incomplete; it is in no particular order; it reports the current affiliation of the colleagues.

Sylvain Lazard (INRIA, Nancy, France);

Steve Chaplick (TU Berlin);

Michael Kaufmann (University of Tuebingen, Germany);

Stephen Kobourov (University of Arizona, Texas);

William Lenhart (Williams College, US);

Sue Whitesides (Victoria University, Canada);

Stephen Wismath (University of Lethbridge, Canada);
Henk Meijer (University College Roosevelt, The Netherlands);
Tetsuo Asano (JAIST, Japan);
Tamara Mchedlidze (University of Karlsruhe, Germany);
Peter Eades (University of Sydney, Australia);
Stephen Kobourov (University of Arizona, US);
Ioannis Tollis (FORTH and University of Crete, Greece);
Matthew Sudermann (University of Bristol, UK);
Godfried Toussaint (NYU, Abu Dhabi);
Seokhee Hong (University of Sydney, Australia);
Marc van Kreveld (Utrecht University, The Netherlands);
Bettina Speckmann (University of Eindhoven, The Netherlands);
Will Evans (University of British Columbia, Canada);
David R. Wood (Monash University, Australia).
Sylvain Lazard (INRIA at Nancy, France)

Consulting

- 2016 : Umbria Region: Member of the scientific committee for the public selection of part-time employees of the Umbria Region (CTSPRA), as specified in the DGR 178-2016.
- 2013-14 : Ministry of Environment of Italy, President of the Testing Committee of the SISTRI Platform.
- 2013 : Umbria Region, Member of the Scientific Committee for the *Umbrian Digital Agenda (Agenda Digitale dell'Umbria)*.
- 2011 : Huddle, London. Information analysis for the automatic detection of experts and interested users in Huddle.
- 2011 : Benetton Group. Design of a HCI system to edit movies on moving screens.
- 2009-2014 : Central Bank of S. Marino. Analysis and design of a fraud detection system.

- 2006–2016 : Umbria Region, Italy. Member of the executive committee for the adoption of open source software in the Public Administration (CCOS).
- 2006–2014 : Sintesi Industries s.r.l., Perugia, Italy. Design of a diagrammatic interface for reverse engineering applications.
- 2007–2009 : Italian Government. National Testing Committee of the Italian Public Connectivity System (SPC-CNIPA).
- 2004 : Senate of the Italian Republic (Senato della Repubblica Italiana), Italian Government. Member of a committee for the selection of qualified personnel for the computer science division of the Italian Senate.
- 2003–2005 : Angelantoni Industries s.r.l., Perugia, Italy. Automation of robotic systems to store and access bio-medical data and materials.
- 2003 : Province of Perugia, Perugia, Italy. Member of the committee for testing and validating the COM-NET-UMBRIA network.
- 2001 : Società Villa Umbra, Perugia, Italy. Responsible for the design of courses on computer science for public employees.
- 1999 : School of Public Administration of the Italian Government (Scuola della Pubblica Amministrazione Italiana), Rome, Italy. Courses on models and methodologies for information systems design.

Professional Societies

- European Association for Theoretical Computer Science.
- Institute of Electrical and Electronic Engineers.
- Association of Computing Machinery.

LIST OF PUBLICATIONS

[EBP] Edited Books and Proceedings

- [EBP-5] G. Liotta, R. Tamassia, I.G. Tollis, eds., “Graph Algorithms and Applications 5,” World Scientific Publishing Co., 2006.
- [EBP-4] G. Liotta, R. Tamassia, I.G. Tollis, eds., “Graph Algorithms and Applications 4,” World Scientific Publishing Co., 2006.
- [EBP-3] G. Liotta, R. Tamassia, I.G. Tollis, eds., “Graph Algorithms and Applications 3,” World Scientific Publishing Co., 2004.

[EBP-2] G. Liotta, R. Tamassia, I.G. Tollis, eds., “Graph Algorithms and Applications 2,” World Scientific Publishing Co., 2004.

[EBP-1] G. Liotta ed., “Graph Drawing,” *Proceedings of the Symposium on Graph Drawing, GD '03*, Lecture Notes in Computer Science, vol. 2912, Springer-Verlag, 2003.

[ESI] **Edited Special Issues**

[ESI-5] W. Didimo and G. Liotta “Special Issue on the 28th European Workshop on Computational Geometry,” *Computational Geometry: Theory and Applications*, Vol. 47, no. 3, 2014.

[ESI-4] G. Liotta and H. Meijer “Special Issue on Graph Drawing Guest Editors Foreword,” *Discrete Applied Mathematics*, Vol. 155, no. 9, 2007.

[ESI-3] G. Liotta, “Special Issue on Selected Papers from the Eleventh International Symposium on Graph Drawing, GD 2003 Guest Editors Foreword,” *Journal of Graph Algorithms and Applications*, Vol. 9, no. 1, pp. 3-5, 2005.

[ESI-2] G. Liotta and I.G. Tollis, “Advances in Graph Algorithms: Special Issue on Selected Papers from the Workshop on Algorithms and Data Structures WADS 2001, Guest Editors’ Foreword,” *Journal of Graph Algorithms and Applications*, vol. 7, no. 2, pp. 101-103, 2003.

[ESI-1] G. Liotta and S.H. Whitesides, “Advances in Graph Drawing: Special Issue on Selected Papers from the Sixth International Symposium on Graph Drawing GD’98, Guest Editors’ Foreword,” *Journal of Graph Algorithms and Applications*, Vol. 4, no. 3, pp. 1-3, 2000.

[BC] **Book Chapters**

[BC-8] G. Liotta, “Proximity Drawings,” *Handbook of Graph Drawing and Visualization*, R. Tamassia editor, CRC Press, pp. 115–146, 2013.

[BC-7] E. Di Giacomo, W. Didimo, and G. Liotta, “Spine and Radial Drawings,” *Handbook of Graph Drawing and Visualization*, R. Tamassia editor, CRC Press, pp. 247–281, 2013.

[BC-6] E. Di Giacomo, G. Liotta, R. Tamassia, ‘Drawings of Graphs,’ *Handbook of Graph Theory, 2nd Edition*, J. Gross and J. Yellen eds., CRC Press, pp. 1239-1290, 2013.

[BC-5] W. Didimo and G. Liotta, “The Crossing Angle Resolution in Graph Drawing,” *Thirty Essays on Geometric Graph Theory*, Janos Pach editor, Springer, pp. 167–184, 2012.

- [BC-4] G. Liotta, E. Di Giacomo, R. Magni, and F. Corradi, “Web Solutions for Rehabilitation and Daily Life,” *Assistive Technology Assessment Handbook*, S. Federici and M.J. Scherer editors, CRC Press Series in Rehabilitation Science in Practice, pp. 361–376, 2012.
- [BC-3] W. Didimo and G. Liotta, “Graph Visualization and Data Mining,” *Mining Graph Data*, D. Cook and L. Holder editors, Wiley, pp. 35–63, 2006.
- [BC-2] R. Tamassia and G. Liotta, “Graph Drawing,” *Handbook of Discrete and Computational Geometry, 2nd Edition*, J. O’Rourke ed., pp. 1163–1187, CRC Press, 2004.
- [BC-1] G. Liotta, R. Tamassia “Drawings of Graphs,” *Handbook of Graph Theory*, J. Gross and J. Yellen eds., CRC Press, pp. 1042-1073, 2003.

[JP] **Journal Papers**

- [JP-105] W. Didimo, G. Liotta, and F. Montecchiani, “A Survey on Graph Drawing Beyond Planarity” *ACM Computing Surveys*, on print.
- [JP-104] A. Arleo, W. Didimo, G. Liotta, and F. Montecchiani, “A Distributed Multilevel Force-directed Algorithm” *IEEE Transactions on Parallel and Distributed Systems*, on print, available on line. DOI Bookmark: 10.1109/TPDS.2018.2869805.
- [JP-103] W. Didimo, G. Liotta, M. Patrignani, “HV-Planarity: Algorithms and Complexity”, *Journal of Computer and System Sciences*, vol. 90, pp. 72–90, 2019.
- [JP-102] T. Biedl, G. Liotta, F. Montecchiani, “Embedding-preserving Rectangle Visibility Representations of Nonplanar Graphs”, *Discrete and Computational Geometry*, vol. 60, no. 2, pp 345–380, 2018.
- [JP-101] A. Arleo, C. Binucci, E. Di Giacomo, W. S.Evans, L. Grilli, G. Liotta, H. Meijer, F. Montecchiani, S. H. Whitesides, S. Wismath “Visibility representations of boxes in 2.5 dimensions”, *Computational geometry: Theory and Applications*, vol. 72, pp. 19–33, 2018.
- [JP-100] A. Arleo, W. Didimo, G. Liotta, F. Montecchiani, “Profiling Distributed Graph Processing Systems through Visual Analytics” *Future Generation Computer Systems*, vol. 87, pp. 43–57, 2018.
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