

Giordano Da Lozzo

<http://www.dia.uniroma3.it/~dalozzo>
dalozzo@dia.uniroma3.it

EDUCATION

ROMA TRE UNIVERSITY

PHD IN COMPUTER SCIENCE

Thesis title: Planar graphs with vertices in prescribed regions: models, algorithms, and complexity
May 2015 | Rome, IT

MS IN COMPUTER SCIENCE

Thesis title: Analysis and Design of a paradigm for the exploration and the visualization of relational data in mobile environment
110/110 cum Laude
May 2010 | Rome, IT

LINKS

Google Scholar:// 2f0iSvUAAAAJ
ResearchGate:// Giordano_Da_Lozzo
ORCID:// 0000-0003-2396-5174
Scopus:// 37007593400
ResearcherID:// M-3447-2013

COURSEWORK

GRADUATE

Theoretical Computer Science
Artificial Intelligence
Operational Research
Quantum and Parallel Computing
Computer Graphics

UNDERGRADUATE

Algorithms and Data Structures
Compilers
Objected-Oriented Programming
Functional and Logic Programming
Operating Systems
Unix Tools and Scripting

SKILLS

PROGRAMMING

Front-end and visualization:
JavaScript libraries (D3.js, jQuery, Raphaël, Paper.js), Node.js software platform (Express, Socket.IO, Redis.IO), SVG, HTML5 Canvas, OpenGL, OpenGL ES, WebGL (Three.js)
Programming languages:
Java, J2EE (Jsp, Servlet), C, Objective-C, Python, PLaSM, MATLAB, JavaScript, Bash scripting, Turbo Pascal, Prolog, Golog, OCaml

PROFESSIONAL EXPERIENCE

ROMA TRE UNIVERSITY POSTDOCTORAL RESEARCHER

Oct 2017 – Sept 2020 | Rome, IT

UNIVERSITY OF CALIFORNIA, IRVINE ASSISTANT PROJECT SCIENTIST

Oct 2016 – Sept 2017 | Irvine, CA USA

ROMA TRE UNIVERSITY PHD STUDENT AND POSTDOCTORAL RESEARCHER

Oct 2012 – Sept 2016 | Rome, IT

RIPE NETWORK COORDINATION CENTER "LEONARDO DA VINCI PROGRAMME" FELLOW

June 2011 – Dec 2011 | Amsterdam, NL

INTER-UNIVERSITY CONSORTIUM FOR SUPERCOMPUTING APPLICATIONS IN UNIVERSITIES AND RESEARCH (CASPUR)

RESEARCH COLLABORATOR

Feb 2011 – May 2011 | Rome, IT

GRID COMPUTING LABORATORY, ENGINEERING S.P.A. INTERN IN THE R&D DIVISION

Oct 2010 – Jan 2011 | Rome, IT

ROMA TRE UNIVERSITY RESEARCH COLLABORATOR

June 2010 – Sept 2010 | Rome, IT

RESEARCH

TOP 5 PAPERS

G. Da Lozzo, A. D'Angelo, F. Frati. On Planar Greedy Drawings of 3-Connected Planar Graphs. SoCG '17.
G. Da Lozzo, G. Di Battista, F. Frati, M. Patrignani. Computing NodeTrix Representations of Clustered Graphs. GD '16
P. Angelini, G. Da Lozzo, G. Di Battista, V. Di Donato, P. Kindermann, G. Rote, I. Rutter. Windrose Planarity: Embedding Graphs with Direction-Constrained Edges. SODA '16.
P. Angelini, G. Da Lozzo, F. Frati, A. Lubiw, M. Patrignani, V. Roselli. Optimal Morphs of Convex Drawings. SoCG '15.
P. Angelini, G. Da Lozzo, G. Di Battista, F. Frati, M. Patrignani, V. Roselli. Morphing Planar Graph Drawings Optimally. ICALP '14.

AWARDS

2016 Best Paper at SOFSEM 2018
2015 Best Poster at GD 2016
2011 Best MS thesis Award AICA-Confindustria
2011 "Leonardo da Vinci Programme" Scholarship

TEACHING

2015/2016 (fall term) Theoretical Computer Science (TA)
2015/2016, 2014/2015, and Information Visualization (TA)
2013/2014 (spring term)

RESEARCH INTERESTS

My main research interests are in Graph Drawing and Graph Algorithms. I primarily study problems related to the visualization of graphs. In particular, I consider my work lying at the intersection of the areas of Graph Drawing, Computational Geometry, Combinatorial Optimization, and Graph Theory. Graph Drawing investigates algorithms and bounds to construct geometric and topological representations of graphs; it has applications in several fields of computer science (and beyond), including Information Visualization, Social Network Analysis, Cartography, and Bioinformatics. My focus is on algorithms to construct representations of graphs with nice readability properties. I am interested both in combinatorial as well as geometric questions related to the representation of networks, especially those concerned with planarity and constrained graph embeddings in the plane or higher genus surfaces. I am involved in research projects exploring theoretical questions about the visualization of large and evolving networks, visualizations for cybersecurity, layouts of simultaneous and clustered networks, contact and hybrid representations.

RESEARCH VISITS

Mar 2017	Universität Tübingen	Germany
Mar 2017	Technische Universiteit Eindhoven	The Netherlands
Nov 2014	Karlsruhe Institute of Technology (KIT)	Germany
Oct 2013 - Feb 2014	Charles University of Prague	Czech Republic
Jun 2011 - Jan 2012	RIPE Network Coordination Center	The Netherlands

RESEARCH PROJECTS

2016 - 2017	STAC "The Space/Time Analysis for Cybersecurity program" Role: Assistant project scientist, employed within the project	U.S. DARPA
2014 - 2016	AMANDA "Algorithmics for MAssive and Networked DATA" Role: Research associate, employed within the project	MIUR (PRIN12)
2012 - 2014	LEONE "From global measurements to local management" Role: Research associate, employed within the project	EU FP7 STREP
2010 - 2013	GraDr "Graph Drawing and Representation" Role: Participant	EuroGIGA
2010 - 2012	AlgoDEEP "Algorithmic challenges for Data-intensivE processing on Emerging computing Platforms" Role: Participant	MIUR (PRIN08)

SERVICE TO THE COMMUNITY

PROGRAM COMMITTEES

2017	25th International Symposium on Graph Drawing and Network Visualization
------	---

REVIEWS

Int. Project:	Czech Science Foundation (GA CR)
Journals:	Theoretical Computer Science (TCS), Journal of Graph Algorithms and Applications (JGAA), Journal of Visual Languages & Computing (JVLC), and Computational Geometry: Theory and Applications (CGTA)
Conferences:	IEEE Symposium on Foundations of Computer Science (FOCS), ACM-SIAM Symposium on Discrete Algorithms (SODA), European Symposium on Algorithms (ESA), International Symposium on Graph Drawing & Network Visualization (GD), Symposium on Computational Geometry (SoCG), European Workshop on Computational Geometry (EuroCG), International Symposium on Algorithms and Computation (ISAAC), IEEE Conference on Information Visualization (INFOVIS), International Conference on Algorithms and Discrete Applied Mathematics (CALDAM), and Symposium on Experimental Algorithms (SEA)

INVITATION-ONLY WORKSHOPS

Jun 2017	MRC Conference on Beyond Planarity: Crossing Numbers of Graphs	Snowbird, UT USA
Mar 2017	Bertinoro Workshop on Graph Drawing (BWGD'17)	Bertinoro, IT
Nov 2016	Dagstuhl Seminar "Beyond-Planar Graphs: Algorithmics and Combinatorics"	Dagstuhl, DE
Mar 2016	Bertinoro Workshop on Graph Drawing (BWGD'16)	Bertinoro, IT
Mar 2015	Bertinoro Workshop on Graph Drawing (BWGD'15)	Bertinoro, IT
Mar 2014	Bertinoro Workshop on Graph Drawing (BWGD'14)	Bertinoro, IT
Mar 2013	Bertinoro Workshop on Graph Drawing (BWGD'13)	Bertinoro, IT

CONFERENCE TALKS

GD'16	Beyond Level Planarity	Athens, GR
GD'15	Intersection-Link Representations of Graphs	Los Angeles, CA
GD'15	On the Relationship between Map Graphs and Clique Planar Graphs	Los Angeles, CA
CIAC'15	Planarity of Streamed Graphs	Paris, FR
ISAAC'14	Planar Embeddings with Small and Uniform Faces	Jeonju, KR
GD'14	The Importance of Being Proper (In Clustered-Level Planarity and T-Level Planarity)	Würzburg, DE
ICGT'14	SEFE = C-Planarity?	Grenoble, FR
GD'13	Drawing Non-planar Graphs with Crossing-free Subgraphs	Bordeaux, FR
WIV'12	Visual discovery of the correlation between BGP routing and round-trip delay active measurements	Boston, MA

PH.D. SCHOOLS AND DOCTORAL COURSES

Sept 2014	EuroGIGA PhD School: "Recent Trends in Graph Drawing – Curves, Crossings, and Constraints" (taught by David Eppstein, Fabrizio Frati, Stephen Kobourov, Maarten Löffler, Ignaz Rutter, André Schulz)	Würzburg, DE
June 2013	Computational Geometry and Graph Drawing (taught by Alexander Wolf and Maurizio Patrignani)	Rome, IT
Nov 2013	The Tutte Polynomial (taught by Jaroslav Nesetril and Andrew Goodall)	Prague, CZ
Jul 2013	Algorithmic Graph Theory (taught by Flavia Bonomo)	Rome, Italy
Feb 2013	Readings in Network Visualization (taught by Giuseppe Di Battista and Ioannis G. Tollis)	Rome, IT
Oct 2012	EuroGIGA Fall School 2012: "Graph- and GeoVisualization" (taught by Maurizio Patrignani, Martin Nöllenburg, Christophe Hurter, Jan-Henrik Haurert)	Würzburg, DE
Aug 2012	13th Max Planck Advanced Course on the Foundations of Computer Science (taught by Luca Trevisan, Berthold Vöcking, Avi Wigderson)	Saarbrücken, DE

OTHER COMPUTER SKILLS

Operating systems	Mac OSX, GNU/Linux distributions, MS Windows, Android OS, iOS
Cloud technologies systems	Google App Engine, Microsoft Windows Azure, force.com
DBMS and query languages	DB2, PostgreSQL, MySQL, HSQLDB, SQLite, FQL, XQuery, XPath
Libraries for concurrent programming	POSIX Threads Programming, java.util.concurrent
Frameworks	Java Plugin Framework (JPF), Apache Struts, Google Android SDK, Java Swing, Socket Programming, Facebook Graph API, Google Social Graph API
Markup and typesetting	LATEX2, BIBTEX2, Gnuplot

List of Publications

<http://www.dia.uniroma3.it/~dalozzo>
dalozzo@dia.uniroma3.it

Journal Articles under Revision

- [1] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond level planarity. *Journal of Discrete Algorithms*, 2017. Under Revision.
- [2] Robin Anderson, Shuliang Bai, Fidel Barrera-Cruz, Éva Czabarka and Giordano Da Lozzo and Natalie L. F. Hobson and Jephian C.-H. Lin and Austin Mohr and Heather C. Smith and László A. Székely, and Hays Whitlatch. Analogies between the crossing number and the tangle crossing number. *Discrete Applied Mathematics*, 2017. Under Revision.
- [3] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing NodeTrix representations of clustered graphs. *Journal of Graph Algorithms and Applications*, 2017. Under Revision.
- [4] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. *Theoretical Computer Science*, 2016. Under Revision.
- [5] Patrizio Angelini and Giordano Da Lozzo. Coloring intersection graphs of line segments is hard even with 4 slopes. *Computational Geometry: Theory and Applications*, 2016. Under Revision.

Refereed Journal Articles

- [6] Soroush Alamdari, Patrizio Angelini, Fidel Barrera-Cruz, Timothy M. Chan, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Penny Haxell, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson. How to morph planar graph drawings. *SIAM J. Comput.*, 46(2):824–852, 2017.
- [7] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing for embedded planar graphs. *Algorithmica*, 77(4):1022–1059, 2017.
- [8] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Intersection-link representations of graphs. *Journal of Graph Algorithms and Applications*, 21(4):731–755, 2017.
- [9] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. Algorithms and bounds for L-drawings of directed graphs. *International Journal of Foundations of Computer Science (IJFCS)*, 2017. To appear.
- [10] Patrizio Angelini and Giordano Da Lozzo. SEFE = c-planarity? *The Computer Journal*, 59(12):1831–1838, 2016.
- [11] Patrizio Angelini, Carla Binucci, Giordano Da Lozzo, Walter Didimo, Luca Grilli, Fabrizio Montecchiani, Maurizio Patrignani, and Ioannis Tollis. Algorithms and bounds for drawing non-planar graphs with crossing-free subgraphs. *Computational Geometry: Theory and Applications*, 50:34–48, 2015.
- [12] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Relaxing the constraints of clustered planarity. *Computational Geometry: Theory and Applications*, 48(2):42–75, 2015.
- [13] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. The importance of being proper: (in clustered-level planarity and t-level planarity). *Theoretical Computer Science*, 571:1–9, 2015.
- [14] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on SEFE and partitioned book embedding problems. *Theoretical Computer Science*, 575:71–89, 2015.
- [15] Giordano Da Lozzo, Giuseppe Di Battista, and Claudio Squarcella. Visual discovery of the correlation between BGP routing and round-trip delay active measurements. *Computing*, 96(1):67–77, 2014.
- [16] Giordano Da Lozzo, Giuseppe Di Battista, and Francesco Ingrassia. Drawing graphs on a smartphone. *Journal of Graph Algorithms and Applications*, 16(1):109–126, 2012.

Conference Publications under Revision

- [17] Giordano Da Lozzo and Ignaz Rutter. Realizing facial cycles in planar embeddings. In 35th International Symposium on Theoretical Aspects of Computer Science, STACS 2018, 28 Feb-3 Mar 2018, Caen, France, LIPIcs. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2018. Under revision.
- [18] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. Subexponential-time and fpt algorithms for embedded flat clustered planarity. In Latin American Theoretical Informatics 2018, LATIN, April 16-19, Buenos Aires, Argentina, LNCS, 2018. In preparation.
- [19] Juan José Besa Vial, Giordano Da Lozzo, and Michael T. Goodrich. 4-modal embeddings of directed graphs. In Latin American Theoretical Informatics 2018, LATIN, April 16-19, Buenos Aires, Argentina, LNCS, 2018. In preparation.

Refereed Conference Publications

- [20] Giordano Da Lozzo, William Devanny, David Eppstein, and Timothy Johnson. Square-contact representations of partial 2-trees and triconnected simply-nested graphs. In Proc. 28th International Symposium on Algorithms and Computation (ISAAC '17), 2017. To Appear.
- [21] Steven Chaplick, Markus Chimani, Sabine Cornelsen, Giordano Da Lozzo, Martin Nöllenburg, Maurizio Patrignani, Ioannis G. Tollis, and Alexander Wolff. Planar l-drawings of directed graphs. In Proc. 25th International Symposium on Graph Drawing and Network Visualization (GD '17), 2017. To Appear.
- [22] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Giuseppe Liotta, Fabrizio Montecchiani, and Ignaz Rutter. On the relationship between k-planar and k-quasi planar graphs. In 43rd International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2017), Eindhoven, The Netherlands, June 21-23, 2017, 2017. To appear.
- [23] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Giuseppe Liotta, Fabrizio Montecchiani, and Ignaz Rutter. On the relationship between k-planar and k-quasi planar graphs. In (Informal) Proceedings of the 33rd European Workshop on Computational Geometry, Malmo, Sweden, April 5-7, 2017, 2017.
- [24] Giordano Da Lozzo, Anthony D'Angelo, and Fabrizio Frati. On planar greedy drawings of 3-connected planar graphs. In 33rd International Symposium on Computational Geometry, SoCG 2017, July 4-7, 2017, Brisbane, Australia, LIPIcs. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2017.
- [25] Patrizio Angelini and Giordano Da Lozzo. Clustered planarity with pipes. In Seok-Hee Hong, editor, 27th International Symposium on Algorithms and Computation, ISAAC 2016, December 12-14, 2016, Sydney, Australia, volume 64 of LIPIcs, pages 13:1–13:13. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2016.
- [26] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. In Graph Drawing - 24th International Symposium, GD 2016, Athens, Greece, September 19-21, 2016, Revised Selected Papers, LNCS, 2016. To appear.
- [27] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing NodeTrix Representations of Clustered Graphs. In Graph Drawing - 24th International Symposium, GD 2016, Athens, Greece, September 19-21, 2016, Revised Selected Papers, LNCS, 2016. To appear.
- [28] Patrizio Angelini, Steven Chaplick, Sabine Cornelsen, Giordano Da Lozzo, Giuseppe Di Battista, Peter Eades, Philipp Kindermann, Jan Kratochvíl, Fabian Lipp, and Ignaz Rutter. Simultaneous orthogonal planarity. In Graph Drawing - 24th International Symposium, GD 2016, Athens, Greece, September 19-21, 2016, Revised Selected Papers, LNCS, 2016. To appear.
- [29] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond Level Planarity. In Graph Drawing - 24th International Symposium, GD 2016, Athens, Greece, September 19-21, 2016, Revised Selected Papers, LNCS, 2016. To appear.
- [30] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Valentino Di Donato, Philipp Kindermann, Günter Rote, and Ignaz Rutter. Windrose planarity: Embedding graphs with direction-constrained edges. In Proceedings of the Twenty-Seventh Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2016, Arlington, Virginia, USA, January 10-12, 2016.
- [31] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. L-drawings of directed graphs. In Proc. 42nd International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2016), LNCS, 2016. To appear.
- [32] Patrizio Angelini, Giordano Da Lozzo, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, and Vincenzo Roselli. Optimal morphs of convex drawings. In Lars Arge and János Pach, editors, 31st International Symposium on Computational Geometry, SoCG 2015, June 22-25, 2015, Eindhoven, The Netherlands, volume 34 of LIPIcs, pages 126–140. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2015.

- [33] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. In Algorithms and Complexity - 9th International Conference, CIAC 2015, Paris, France, May 20-22, 2015. Proceedings, LNCS, pages 153–166, 2015.
- [34] Giordano Da Lozzo, Marco Di Bartolomeo, Maurizio Patrignani, Giuseppe Di Battista, Davide Cannone, and Sergio Tortora. Drawing georeferenced graphs - combining graph drawing and geographic data. In José Braz, Andreas Kerren, and Lars Linsen, editors, IVAPP 2015 - Proceedings of the 6th International Conference on Information Visualization Theory and Applications, Berlin, Germany, 11-14 March, 2015., pages 109–116. SciTePress, 2015.
- [35] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Giuseppe Di Battista, Seok-Hee Hong, Maurizio Patrignani, and Vincenzo Roselli. Anchored drawings of planar graphs. In Graph Drawing - 22nd International Symposium, GD 2014, Würzburg, Germany, September 24-26, 2014, Revised Selected Papers, LNCS, pages 404–415, 2014.
- [36] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Morphing planar graph drawings optimally. In Automata, Languages, and Programming - 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part I, LNCS, pages 126–137, 2014.
- [37] Giordano Da Lozzo, Vít Jelínek, Jan Kratochvíl, and Ignaz Rutter. Planar embeddings with small and uniform faces. In Algorithms and Computation - 25th International Symposium, ISAAC 2014, Jeonju, Korea, December 15-17, 2014, Proceedings, LNCS, pages 633–645, 2014.
- [38] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. On some np-complete SEFE problems. In Algorithms and Computation - 8th International Workshop, WALCOM 2014, Chennai, India, February 13-15, 2014, Proceedings, LNCS, pages 200–212, 2014.
- [39] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing. In Graph Drawing - 21st International Symposium, GD 2013, Bordeaux, France, September 23-25, 2013, Revised Selected Papers, LNCS, pages 37–48, 2013.
- [40] Patrizio Angelini, Carla Binucci, Giordano Da Lozzo, Walter Didimo, Luca Grilli, Fabrizio Montecchiani, Maurizio Patrignani, and Ioannis G. Tollis. Drawing non-planar graphs with crossing-free subgraphs. In Graph Drawing - 21st International Symposium, GD 2013, Bordeaux, France, September 23-25, 2013, Revised Selected Papers, LNCS, pages 292–303, 2013.
- [41] Giordano Da Lozzo, Giuseppe Di Battista, and Francesco Ingrassia. Drawing graphs on a smartphone. In Graph Drawing - 18th International Symposium, GD 2010, Konstanz, Germany, September 21-24, 2010. Revised Selected Papers, LNCS, pages 153–164, 2010.

Posters

- [42] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. On the relationship between map graphs and clique planar graphs. In Emilio Di Giacomo and Anna Lubiw, editors, Proc. 23rd International Symposium on Graph Drawing and Network Visualization (GD '15), LNCS, 2015. Poster.
- [43] Giordano Da Lozzo, Giuseppe Di Battista, and Claudio Squarcella. Visual discovery of the correlation between bgp routing and round-trip delay active measurements. In 1st IMC Workshop on Internet Visualization (WIV 2012), 2012. Poster.

Technical Reports

- [44] Robin Anderson, Shuliang Bai, Fidel Barrera-Cruz, Éva Czabarka and Giordano Da Lozzo and Natalie L. F. Hobson and Jephian C.-H. Lin and Austin Mohr and Heather C. Smith and László A. Székely, and Hays Whitlatch. Analogies between the crossing number and the tangle crossing number. Tech. Report arXiv:1708.09281, Cornell University, 2017.
- [45] Giordano Da Lozzo, William Devanny, David Eppstein, and Timothy Johnson. Square-contact representations of partial 2-trees and triconnected simply-nested graphs. Tech. Report arXiv:1710.00426, Cornell University, 2017.
- [46] Steven Chaplick, Markus Chimani, Sabine Cornelsen, Giordano Da Lozzo, Martin Nöllenburg, Maurizio Patrignani, Ioannis G. Tollis, and Alexander Wolff. Planar l-drawings of directed graphs. Tech. Report arXiv:1708.09107, Cornell University, 2017.
- [47] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Giuseppe Liotta, Fabrizio Montecchiani, and Ignaz Rutter. On the relationship between k-planar and k-quasi planar graphs. Tech. Report arXiv:1702.08716, Cornell University, 2017.
- [48] Giordano Da Lozzo, Anthony D'Angelo, and Fabrizio Frati. On planar greedy drawings of 3-connected planar graphs. Tech. Report arXiv:1612.09277, Cornell University, 2016.

- [49] Patrizio Angelini and Giordano Da Lozzo. Clustered planarity with pipes. Tech. Report arXiv:1609.09679, Cornell University, 2016.
- [50] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing nodetrix representations of clustered graphs. Tech. Report arXiv:1608.08952, Cornell University, 2016.
- [51] Patrizio Angelini, Steven Chaplick, Sabine Cornelsen, Giordano Da Lozzo, Giuseppe Di Battista, Peter Eades, Philipp Kindermann, Jan Kratochvíl, Fabian Lipp, and Ignaz Rutter. Simultaneous orthogonal planarity. Tech. Report arXiv:1608.08427, Cornell University, 2016.
- [52] Giordano Da Lozzo and Ignaz Rutter. On the complexity of realizing facial cycles. Tech. Report arXiv:1607.02347, Cornell University, 2016.
- [53] Giordano Da Lozzo and Ignaz Rutter. Strengthening hardness results to 3-connected planar graphs. Tech. Report arXiv:1607.02346, Cornell University, 2016.
- [54] Giordano Da Lozzo, Vida Dujmović, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. Tech. Report arXiv:1606.03890, Cornell University, 2016.
- [55] Soroush Alamdari, Patrizio Angelini, Fidel Barrera-Cruz, Timothy M. Chan, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Penny Haxell, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson. How to morph planar graph drawings. Tech. Report arXiv:1606.00425, Cornell University, 2016.
- [56] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond level planarity. Tech. Report arXiv:1510.08274, Cornell University, 2015.
- [57] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Valentino Di Donato, Philipp Kindermann, Guenter Rote, and Ignaz Rutter. Windrose planarity: Embedding graphs with direction-constrained edges. Tech. Report arXiv:1510.02659, Cornell University, 2015.
- [58] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Intersection-link representations of graphs. Tech. Report arXiv:1508.07557, Cornell University, 2015.
- [59] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. L-drawings of directed graphs. Tech. Report arXiv:1509.00684, Cornell University, 2015.
- [60] Patrizio Angelini, Giordano Da Lozzo, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, and Vincenzo Roselli. Optimal morphs of convex drawings. Tech. Report arXiv:1503.09021, Cornell University, 2015.
- [61] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. Tech. Report arXiv:1501.07106, Cornell University, 2015.
- [62] Giordano Da Lozzo, Vit Jelinek, Jan Kratochvíl, and Ignaz Rutter. Planar embeddings with small and uniform faces. Tech. Report arXiv:1409.4299, Cornell University, 2014.
- [63] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. On the complexity of clustered-level planarity and t-level planarity. Tech. Report arXiv:1406.6533, Cornell University, 2014.
- [64] Patrizio Angelini and Giordano Da Lozzo. Deepening the relationship between sefe and c-planarity. Tech. Report arXiv:1404.6175, Cornell University, 2014.
- [65] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Morphing planar graph drawings optimally. Tech. Report arXiv:1402.4364, Cornell University, 2014.
- [66] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on sefe and partitioned book embedding problems. Tech. Report arXiv:1311.3607, Cornell University, 2014.
- [67] Patrizio Angelini, Carla Binucci, Giordano Da Lozzo, Walter Didimo, Luca Grilli, Fabrizio Montecchiani, Maurizio Patrignani, and Ioannis Tollis. Algorithms and bounds for drawing non-planar graphs with crossing-free subgraphs. Tech. Report arXiv:1308.6706, Cornell University, 2013.
- [68] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing of embedded planar graphs. Tech. Report arXiv:1309.0683, Cornell University, 2013.
- [69] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Relaxing the constraints of clustered planarity. Tech. Report arXiv:1207.3934, Cornell University, 2012.