

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

| | | |
|----------|---|------------------|
| Mar 2018 | Bertinoro Workshop on Graph Drawing (BWGD'18) | Bertinoro, IT |
| 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 |

PUBLICATIONS

Journal Articles under Revision

- [1] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond level planarity: Cyclic, torus, and simultaneous level planarity. *Theoretical Computer Science*, 2018. Under Revision.
- [2] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. *Theoretical Computer Science*, 2016. Under Revision.

Refereed Journal Articles

- [3] Patrizio Angelini and Giordano Da Lozzo. 3-coloring arrangements of line segments with 4 slopes is hard. *Inf. Process. Lett.*, 137:47–50, 2018.
- [4] 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)*, 29(4):461–480, 2018.
- [5] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing nodetrix representations of clustered graphs. *J. Graph Algorithms Appl.*, 22(2):139–176, 2018.
- [6] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. *JoCG*, 9(1):94–130, 2018.
- [7] 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.
- [8] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing for embedded planar graphs. *Algorithmica*, 77(4):1022–1059, 2017.
- [9] 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.
- [10] Patrizio Angelini, Giordano Dal 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.
- [11] Patrizio Angelini and Giordano Da Lozzo. SEFE = c-planarity? *The Computer Journal*, 59(12):1831–1838, 2016.
- [12] 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.
- [13] 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.
- [14] 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.
- [15] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on SEFE and partitioned book embedding problems. *Theoretical Computer Science*, 575:71–89, 2015.

- [16] 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.
- [17] 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.

Refereed Conference Publications

- [18] Giordano Da Lozzo and Ignaz Rutter. Approximation algorithms for facial cycles in planar embeddings. In *Proc. 29th International Symposium on Algorithms and Computation (ISAAC '18)*, 2018. To Appear.
- [19] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Upward planar morphs. In Therese Biedl and Andreas Kerren, editors, *Graph Drawing and Network Visualization 26th International Symposium, GD 2018, Barcelona, 26-28 September 2018, Revised Selected Papers*, Lecture Notes in Computer Science, 2018. To appear.
- [20] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. Subexponential-time and fpt algorithms for embedded flat clustered planarity. In *44rd International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2018), Cottbus, Germany, June 27-29, 2018*, 2018. To appear.
- [21] Giordano Da Lozzo, Anthony D'Angelo, and Fabrizio Frati. On planar greedy drawings of 3-connected planar graphs. In Boris Aronov and Matthew J. Katz, editors, *33rd International Symposium on Computational Geometry, SoCG 2017, July 4-7, 2017, Brisbane, Australia*, volume 77 of *LIPICs*, pages 33:1–33:16. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2017.
- [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 Hans L. Bodlaender and Gerhard J. Woeginger, editors, *Graph-Theoretic Concepts in Computer Science - 43rd International Workshop, WG 2017, Eindhoven, The Netherlands, June 21-23, 2017, Revised Selected Papers*, volume 10520 of *Lecture Notes in Computer Science*, pages 59–74. Springer, 2017.
- [23] 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 Fabrizio Frati and Kwan-Liu Ma, editors, *Graph Drawing and Network Visualization - 25th International Symposium, GD 2017, Boston, MA, USA, September 25-27, 2017, Revised Selected Papers*, volume 10692 of *Lecture Notes in Computer Science*, pages 465–478. Springer, 2017.
- [24] Giordano Da Lozzo, William E. Devanny, David Eppstein, and Timothy Johnson. Square-contact representations of partial 2-trees and triconnected simply-nested graphs. In Yoshio Okamoto and Takeshi Tokuyama, editors, *28th International Symposium on Algorithms and Computation, ISAAC 2017, December 9-12, 2017, Phuket, Thailand*, volume 92 of *LIPICs*, pages 24:1–24:14. 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.

- [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] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. Subexponential-time and FPT algorithms for embedded flat clustered planarity. Tech. Report arXiv:1803.05465, Cornell University, 2018.
- [45] 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.
- [46] 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.
- [47] Patrizio Angelini and Giordano Da Lozzo. Clustered planarity with pipes. Tech. Report arXiv:1609.09679, Cornell University, 2016.
- [48] 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.
- [49] 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.
- [50] Giordano Da Lozzo and Ignaz Rutter. On the complexity of realizing facial cycles. Tech. Report arXiv:1607.02347, Cornell University, 2016.
- [51] Giordano Da Lozzo and Ignaz Rutter. Strengthening hardness results to 3-connected planar graphs. Tech. Report arXiv:1607.02346, Cornell University, 2016.
- [52] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. Tech. Report arXiv:1606.03890, Cornell University, 2016.
- [53] 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.
- [54] 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.
- [55] 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.
- [56] 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.
- [57] 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.
- [58] 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.

- [59] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. Tech. Report arXiv:1501.07106, Cornell University, 2015.
- [60] 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.
- [61] 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.
- [62] Patrizio Angelini and Giordano Da Lozzo. Deepening the relationship between sse and c-planarity. Tech. Report arXiv:1404.6175, Cornell University, 2014.
- [63] 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.
- [64] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on sse and partitioned book embedding problems. Tech. Report arXiv:1311.3607, Cornell University, 2014.
- [65] 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.
- [66] 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.
- [67] 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.