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Personal

Born on December 14, 1984.
Italy Citizen.

Education

2011 - 2014 Ph.D. Computer Science Engineering, Roma Tre University.
2007 - 2010 M.S. Computer Science Engineering, 110/110 *cum laude*, Roma Tre University.
2003 - 2007 B.S. Computer Science Engineering, 102/110, Roma Tre University.

Professional Experience

Research Activity

Feb. 2017 - Apr. 2017 Collaborator: *"Requirements analysis for visualizing the evolution of concepts in the Web"*, Roma Tre University
2016 - 2017 Postdoctoral Researcher: *"Algorithms for drawing graphs"*, Roma Tre University
2014 - 2016 Postdoctoral Researcher: *"Methods and tools for monitoring dynamic networks"*, Roma Tre University
2011 - 2014 Ph.D. Student: *"Morphing and Visiting Drawings of Graphs"*, Roma Tre University

Teaching Activity

a.y. 2016/2017	Adjunct Professor for the course “Elements of Computer Science”, Department of Engineering (Mechanical Engineering), Roma Tre University
a.y. 2016/2017	Teaching Assistant for “Foundations of Computer Science and Programming”, Department of Engineering (Computer Science Engineering), Roma Tre University
a.y. 2016/2017	Teaching Assistant for “Analysis of Event-Driven Systems”, Department of Engineering (Computer Science Engineering), Roma Tre University
a.y. 2015/2016 - 2016/2017	Teaching Assistant for “Operation Research II”, Department of Engineering (Computer Science Engineering), Roma Tre University
a.y. 2015/2016 - 2016/2017	Teaching Assistant for “Operation Research II”, Department of Engineering (Computer Science Engineering), Roma Tre University
a.y. 2015/2016	Teaching Assistant for “Foundations of Computer Science and Programming”, Department of Engineering (Civil Engineering), Roma Tre University
a.y. 2013/2014 - 2015/2016	Teaching Assistant for “Foundations of Computer Science and Programming”, Department of Engineering (Electronic Engineering), Roma Tre University
a.y. 2009/2010 - 2011/2012	Tutor for “Foundations of Computer Science and Programming”, Department of Electronic Engineering, Roma Tre University

Research Interests

Graph Drawing, Computational Geometry, Graph Algorithms.

Research Visits

Jul. 2015	Visiting Researcher at Wilhelm-Schickard Institut für Informatik, Universität Tübingen, Germany
May - Jul. 2013	Visiting Ph.D. Student at David R. Cheriton Institute of Computer Science, University of Waterloo, Canada
Sep. - Dec. 2012	Visiting Ph.D. Student at Wilhelm-Schickard Institut für Informatik, Universität Tübingen, Germany

Workshops

Nov. 2016	Beyond-Planar Graphs: Algorithmics and Combinatorics, Wadern, Germany
Nov. 2013	13rd Homonolo Workshop, Nova Louka, Czech Republic
Dec. 2011	12nd Homonolo Workshop, Nova Louka, Czech Republic
Mar. 2011	11st Bertinoro Workshop on Graph Drawing, Bertinoro (FC), Italy

Ph.D. Schools

Sep. 2014	EuroGIGA School “CCC”: <i>Recent Trends in Graph Drawing Curves, Crossings, and Constraints</i> , Würzburg, Germany
Oct. 2012	EuroGIGA Fall School: <i>Graph- and GeoVisualization</i> , Würzburg, Germany
Sep. 2011	<i>School on Graph Theory, Algorithms and Applications</i> , Erice (TP), Italy

Research Projects

AMANDA - Algorithmics for Massive and Networked Data, <http://www.dia.uniroma3.it/~amanda/>, founded by MIUR, the Italian Ministry of University and Scientific Research

EuroGiga-GraDR - Graph Drawings and Representations, <http://kam.mff.cuni.cz/gradr/>, founded by European Science Foundation

AlgoDEEP - Algorithmic Challenges for Data-Intensive Processing on Emerging Computing Platforms, <http://verona.dei.unipd.it/~prin08/>, founded by MIUR, the Italian Ministry of University and Scientific Research

Refereeing

International Journals

- 2015 – 2016 Theoretical Computer Science (TCS)
- 2015 – 2017 Journal of Graph Algorithms and Applications (JGAA)

Conferences

- 2017 European Workshop on Computational Geometry (EuroCG)
- 2016 – 2017 IEEE Pacific Visualization (PacificVis)
- 2016 International Symposium on Algorithms and Computation (ISAAC)
- 2011 – 2016 International Symposium on Graph Drawing (GD)
- 2015 Conference on Algorithms and Discrete Applied Mathematics (CALDAM)
- 2014 – 2015 International Workshop on Algorithms and Computation (WALCOM)
- 2014 European Symposium on Algorithms (ESA)
- 2014 Symposium on Theoretical Aspects of Computer Science (STACS)
- 2013 Algorithm and Data Structures Symposium (WADS)
- 2013 International Symposium on Experimental Algorithms (SEA)

Awards and Recognitions

- 2016 SOFSEM Best Paper Award
- 2015 SOCG Young Researcher Support
- 2013 SIAM Student Travel Award for ACM-SIAM Symposium on Discrete Algorithms (SODA)

List of Publications

Journal Articles

- [j6] 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**”. In: *SIAM Journal on Computing* (2017). To appear.
- [j5] Patrizio Angelini, Michael A. Bekos, Felice De Luca, Walter Didimo, Michael Kaufmann, Stephen Kobourov, Fabrizio Montecchiani, Chrysanthi N. Raftopoulou, Vincenzo Roselli, and Antonios Symvonis. “**Vertex-Coloring with Defects**”. In: *Journal of Graph Algorithms and Applications* 21.3 (2017), pages 313–340. DOI: 10.7155/jgaa.00418.

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- [j4] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. “**Relaxing the Constraints of Clustered Planarity**”. In: *Computational Geometry: Theory and Applications* 48.2 (2015), pages 42–75. DOI: 10.1016/j.comgeo.2014.08.001.
 - [j3] 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)**”. In: *Theoretical Computer Science* 571 (2015), pages 1–9. ISSN: 0304-3975. DOI: 10.1016/j.tcs.2014.12.019.
 - [j2] Patrizio Angelini, Walter Didimo, Stephen Kobourov, Tamara Mchedlidze, Vincenzo Roselli, Antonios Symvonis, and Stephen Wismath. “**Monotone Drawings of Graphs with Fixed Embedding**”. In: *Algorithmica* 71.2 (2015), pages 233–257. ISSN: 0178-4617. DOI: 10.1007/s00453-013-9790-3.
 - [j1] Michael A. Bekos, Michael Kaufmann, Robert Krug, Thorsten Ludwig, Stefan Näher, and Vincenzo Roselli. “**Slanted Orthogonal Drawings: Model, Algorithms and Evaluations**”. In: *Journal of Graph Algorithms and Applications* 18.3 (2014), pages 459–489. DOI: 10.7155/jgaa.00332.

Conference Proceedings

- [c15] Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. “**LR-Drawings of Ordered Rooted Binary Trees and Near-Linear Area Drawings of Outerplanar Graphs**”. In: *Proceedings of the Twenty-Eighth Annual ACM-SIAM Symposium on Discrete Algorithms*. Edited by Philip Klein. 2017, pages 1980–1999. DOI: 10.1137/1.9781611974782.129.
- [c14] Enrico Grande, Gaia Nicosia, Andrea Pacifici, and Vincenzo Roselli. “**An exact algorithm for a multicommodity min-cost flow over time problem**”. In: *International Network Optimization Conference (INOC)*. Edited by Luis Gouveia and Pedro Moura. To appear. Springer Berlin Heidelberg, 2017.
- [c13] Patrizio Angelini, Michael A. Bekos, Michael Kaufmann, and Vincenzo Roselli. “**Vertex-Coloring with Star-Defects**”. In: *WALCOM: Algorithms and Computation: 10th International Workshop, WALCOM 2016, Kathmandu, Nepal, March 29-31, 2016, Proceedings*. Edited by Mohammad Kaykobad and Rossella Petreschi. Springer International Publishing, 2016, pages 40–51. ISBN: 978-3-319-30139-6. DOI: 10.1007/978-3-319-30139-6_4.
- [c12] 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: *SOFSEM 2016: Theory and Practice of Computer Science: 42nd International Conference on Current Trends in Theory and Practice of Computer Science, Harrachov, Czech Republic, January 23-28, 2016, Proceedings*. Edited by Mārtiņš Rūsiņš Freivalds, Gregor Engels, and Barbara Catania. Berlin, Heidelberg: Springer Berlin Heidelberg, 2016, pages 134–147. ISBN: 978-3-662-49192-8. DOI: 10.1007/978-3-662-49192-8_11.
- [c11] Giordano Da Lozzo, Vida Dujmović, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. “**Drawing Planar Graphs with Many Collinear Vertices**”. In: *Graph Drawing and Network Visualization: 24th International Symposium, GD 2016, Athens, Greece, September 19-21, 2016, Revised Selected Papers*. Edited by Yifan Hu and Martin Nöllenburg. Cham: Springer International Publishing, 2016, pages 152–165. ISBN: 978-3-319-50106-2. DOI: 10.1007/978-3-319-50106-2_13.
- [c10] Patrizio Angelini, Giordano Da Lozzo, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, and Vincenzo Roselli. “**Optimal Morphs of Convex Drawings**”. In: *31st International Symposium on Computational Geometry (SoCG 2015)*. Edited by Lars Arge and János Pach. Volume 34. Leibniz International Proceedings in Informatics (LIPIcs). Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2015, pages 126–140. ISBN: 978-3-939897-83-5. DOI: 10.4230/LIPIcs.SOCG.2015.126.
- [c9] Giuseppe Di Battista, Valentino Di Donato, Maurizio Patrignani, Maurizio Pizzonia, Vincenzo Roselli, and Roberto Tamassia. “**BitConeView: Visualization of Flows in the Bitcoin Transaction Graph**”. In: *IEEE Symposium on Visualization for Cyber Security (VizSec 2015)*. Edited by Lane Harrison, Nicolas Prigent, Sophie Engle, Daniel Best, and John Goodall. IEEE, 2015, pages 1–8. ISBN: 978-1-4673-7599-3. DOI: 10.1109/VIZSEC.2015.7312773.

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- [c8] 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*. Edited by Christian Duncan and Antonios Symvonis. Volume 8871. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2014, pages 404–415. ISBN: 978-3-662-45802-0. DOI: 10.1007/978-3-662-45803-7_34.
 - [c7] 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*. Edited by Javier Esparza, Pierre Fraigniaud, Thore Husfeldt, and Elias Koutsoupias. Volume 8572. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2014, pages 126–137. ISBN: 978-3-662-43947-0. DOI: 10.1007/978-3-662-43948-7_11.
 - [c6] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. “**The Importance of Being Proper**”. In: *Graph Drawing*. Edited by Christian Duncan and Antonios Symvonis. Volume 8871. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2014, pages 246–258. ISBN: 978-3-662-45802-0. DOI: 10.1007/978-3-662-45803-7_21.
 - [c5] Soroush Alamdari, Patrizio Angelini, Timothy M. Chan, Giuseppe Di Battista, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson. “**Morphing Planar Graph Drawings with a Polynomial Number of Steps**”. In: *24th ACM-SIAM Symposium on Discrete Algorithms (SODA ’13)*. 2013, pages 1656–1667. DOI: 10.1137/1.9781611973105.119.
 - [c4] Patrizio Angelini, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. “**Morphing Planar Graph Drawings Efficiently**”. In: *Graph Drawing*. Edited by Stephen Wismath and Alexander Wolff. Volume 8242. Lecture Notes in Computer Science. Springer International Publishing, 2013, pages 49–60. ISBN: 978-3-319-03840-7. DOI: 10.1007/978-3-319-03841-4_5.
 - [c3] Michael A. Bekos, Michael Kaufmann, Robert Krug, Stefan Näher, and Vincenzo Roselli. “**Slanted Orthogonal Drawings**”. In: *Graph Drawing*. Edited by Stephen Wismath and Alexander Wolff. Volume 8242. Lecture Notes in Computer Science. Springer International Publishing, 2013, pages 424–435. ISBN: 978-3-319-03840-7. DOI: 10.1007/978-3-319-03841-4_37.
 - [c2] Patrizio Angelini, Giuseppe Di Battista, Michael Kaufmann, Tamara Mchedlidze, Vincenzo Roselli, and Claudio Squarcella. “**Small Point Sets for Simply-Nested Planar Graphs**”. In: *Graph Drawing (GD ’11)*. Edited by Marc van Kreveld and Bettina Speckmann. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2011, pages 75–85. ISBN: 978-3-642-25877-0. DOI: 10.1007/978-3-642-25878-7_8.
 - [c1] Patrizio Angelini, Walter Didimo, Stephen Kobourov, Tamara Mchedlidze, Vincenzo Roselli, Antonios Symvonis, and Stephen Wismath. “**Monotone Drawings of Graphs with Fixed Embedding**”. In: *(GD ’11)*. Edited by Marc van Kreveld and Bettina Speckmann. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2011, pages 379–390. ISBN: 978-3-642-25877-0. DOI: 10.1007/978-3-642-25878-7_36.

Technical Reports

- [r9] 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**. Technical report arXiv:1606.00425. Cornell University, 2016. URL: <http://arxiv.org/abs/1606.00425>.
- [r8] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. **Drawing Planar Graphs with Many Collinear Vertices**. Technical report arXiv:1606.03890. Cornell University, 2016. URL: <http://arxiv.org/abs/1606.03890>.
- [r7] Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. **LR-Drawings of Ordered Rooted Binary Trees and Near-Linear Area Drawings of Outerplanar Graphs**. Tech. Report arXiv:1610.02841. Cornell University, 2016. URL: <http://arxiv.org/abs/1610.02841>.

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- [r6] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. **L-Drawings of Directed Graphs**. Technical report arXiv:1503.09021. Cornell University, 2015. URL: <http://arxiv.org/abs/1509.00684>.
- [r5] Patrizio Angelini, Giordano Da Lozzo, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, and Vincenzo Roselli. **Optimal Morphs of Convex Drawings**. Technical report arXiv:1503.09021. Cornell University, 2015. URL: <http://arxiv.org/abs/1503.09021>.
- [r4] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. **Morphing Planar Graph Drawings Optimally**. Technical report arXiv:1402.4364. Cornell University, 2014. URL: <http://arxiv.org/abs/1402.4364>.
- [r3] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. **On the Complexity of Clustered-Level Planarity and T-Level Planarity**. Technical report arXiv:1406.6533. Cornell University, 2014. URL: <http://arxiv.org/abs/1406.6533>.
- [r2] Patrizio Angelini, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. **Morphing Planar Graph Drawings Efficiently**. Technical report arXiv:1308.4291. Cornell University, 2013. URL: <http://arxiv.org/abs/1308.4291>.
- [r1] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. **Relaxing the Constraints of Clustered Planarity**. Technical report arXiv:1207.3934. Cornell University, 2012. URL: <http://arxiv.org/abs/1207.3934>.

Other Publications

- [t2] Vincenzo Roselli. “**Morphing and Visiting Drawings of Graphs**”. PhD thesis. Dottorato di Ricerca in Ingegneria, Sezione Informatica ed Automazione, XXVI Ciclo: Roma Tre University, 2014. URL: <http://www.dia.uniroma3.it/~roselli/media/docs/MorphingAndVisiting-Roselli.pdf>.
- [t1] Vincenzo Roselli. “**Graph Animations: Morphing Planar Structures**”. M.S. Thesis. Roma Tre University, 2010.