LORENZO DE STEFANI

Curriculum vitae

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CURRENT POSITION

Ph.D. Candidate, Brown University (USA), advised by Professor Eli Upfal (eli@es.brown.edu).

EDUCATION

Ph.D. Information Engineering, University of Padova (Italy), 2016

Advisor: Professor Gianfranco Bilardi

M.Sc. (Laurea Specialistica) Computer Engineering, University of Padua (Italy), 2012

Advisor: Professor Gianfranco Bilardi

Final Grade: 110/110 cum laude

B.Sc. (Laurea) Computer Engineering, University of Padua (Italy), 2009

Advisor: Professor Giorgio Maria Di Nunzio

Final Grade: 110/110 cum laude

PUBLICATIONS

Journal Articles

2017 **L. De Stefani**, A. Epasto, M. Riondato, and E. Upfal. TRIÉST: Counting Local and Global Triangles in Fully-dynamic Streams with Fixed Memory Size. *ACM*

Transactions on Knowledge Discovery from Data.

2015 L. De Stefani, F. Silvestri. Exploiting non-constant safe memory in resilient

algorithms and data structures. Theoretical Computer Science.

Conference Proceedings

- G. Bilardi and L. De Stefani. and E. Upfal. The I/O complexity of Toom-Cook Integer Multiplication. *To appear in the proceedings of the ACM-SIAM Symposium on Discrete Algorithms (SODA)*.
- 2017 **L. De Stefani**, <u>E. Terolli</u> and <u>E. Upfal</u>: Tiered sampling: An efficient method for approximate counting sparse motifs in massive graph streams. *Proceedings of 5th IEEE International Conference on Big Data (IEEE Big Data)*.
- Z. Zhao, **L. De Stefani**, E. Zgraggen, C. Binnig, E. Upfal and T. Kraska: Controlling False Discoveries During Interactive Data Exploration. *Proceedings of the 38th ACM SIGMOD International Conference on Management of Data* (SIGMOD).
- Z. Zhao, E. Zgraggen, L. De Stefani, C. Binnig, E. Upfal and T. Kraska: Safe Visual Data Exploration. *Proceedings of the 38th ACM SIGMOD International Conference on Management of Data* (SIGMOD).
- 2017 C. Binning, **L. De Stefani**, T. Kraska, E. Upfal, E. Zgraggen and Z. Zhao: Toward Sustainable Insights, or Why Polygamy is Bad for You. *Proceedings of the 7th biennial Conference on Innovative Data Systems Research (CIDR)*.
- G. Bilardi and L. De Stefani: The I/O Complexity of Strassen's Matrix Multiplication with Recomputation. *Proceedings of the 15th biennial Algorithms and Data Structures Symposium (WADS)*.
- 2016 **L. De Stefani**, A. Epasto, M. Riondato, and E. Upfal: TRIÉST: Counting Local and Global Triangles in Fully-dynamic Streams with Fixed Memory Size. *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (KDD) **Best Student Paper Award (Research Track).**
- 2016 **L. De Stefani**, A. Epasto, E. Upfal and F. Vandin: Reconstructing Hidden Permutations Using the Average-Precision (AP) Correlation Statistic. *Proceedings of the 30th AAAI Conference on Artificial Intelligence (AAAI)*.
- **L. De Stefani**, G. Di Nunzio and G. Vezzaro: A Visualization Tool of Probabilistic Models for Information Access Components. *Proceedings of the 13th European Conference on Research and Advanced Technology for Digital Libraries (ECDL)*.

AWARDS

2016 Best Student Paper Award (Research Track) at ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD'16)

GRANTS AND FELLOWSHIPS

- 2016 Student Travel Grant to the 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD16)
- 2014 Brown University Graduate Fellowship
- 2013 University of Padova Graduate Fellowship

INVITED TALKS

- 2016 Counting Local and Global Triangles in Fully-dynamic Streams with Fixed Memory Size, Department of Computer Science, Boston University, Boston (USA), September 30.
- 2015 Counting Local and Global Triangles in Fully-dynamic Streams with Fixed Memory Size, Workshop on Scalable Approaches to High Performance and High Productivity Computing (ScalPerf), Bertinoro Center for Informatics, Bertinoro (Italy), September 26.

ADDITIONAL RESEARCH EXPERIENCE

Brown University (Providence, RI, USA) – Visiting Student, February–March

TEACHING EXPERIENCE

Brown University

Probability for Computing and Data Analysis (CS1450) – Co-Instructor (fall 2018) Probability and Computing (CS1550) – Teaching Assistant (spring 2017, spring 2018)

University of Padova

Parallel Computing – Teaching Assistant (a.a. 2013-2014, a.a. 2014-2015).

SERVICE TO THE SCIENTIFIC COMMUNITY

Organizing Committee

Workshop on Scalable Approaches to High Performance and High Productivity Computing (ScalPerf), Bertinoro Center for Informatics – Web Co-chair - 2012 – present.

Program Committee

IEEE DSAA '18

Journal Reviewing

ACM Transactions on Knowledge Discovery from Data (TKDD)

Conference Reviewing

AAAI'17, AAAI - ICWSM'17, ACM - SIAM SODA'17, ACM - WSDM'17, AAAI'16, IEEE/ACM – ASONAM'16, ACM - SIGKDD'16, ACM - WebSci'16, IEEE/ACM – ASONAM'15, ACM - SIGKDD'15, ACM – ICS'13.

ADDITIONAL TRAINING

- 2016 Brown University Harriet W. Sheridan Center for Teaching and Learning Teaching Certificate I: Reflective Teaching.
- 2016 Sao Paulo Summer School on Advanced Algorithms, Sao Paulo (Brazil).
- 2013 AACSE Ph.D. summer school on Algorithms and Architectures for Computational Science and Engineering, University of Padova: September 12-16, Padova (PA), Italy
- 2012 21st Summer School of Parallel Computing, CINECA: July 2-13, Casalecchio di Reno (BO), Italy.