# Curriculum Vitae

## Charalampos E. Tsourakakis Department of Computer Science, Boston University 111 Cummington Mall, Boston, MA 02215

https://tsourakakis.com/ August, 2018

## Contents

1	Personal Particulars	2
2	Appointments	2
3	Education	3
4	Teaching Record	3
5	Publications         5.1 Refereed Journals          5.2 Refereed Conferences          5.3 Book Chapters          5.4 Preprints          5.5 Patents          5.6 Tutorials	3 5 7 8 8
6	Presentations 6.1 Invited talks	8 10
7	Students	11
8	8.1 Senior Program Committees	11 11 12 12 12
9	9.1 Management, Administrative and other Relevant Activities	14 14 14

## 1 Personal Particulars

First name: Charalampos Last name: Tsourakakis

E-mail: ctsourak@bu.edu, babis@seas.harvard.edu

Phone: +1-617-353-8919

Nationality: Greek

Web page: https://tsourakakis.com/

## 2 Appointments

Assistant Professor, 1/2017 - now Boston MA

Boston University

Primary appointment: CS Secondary appointment: ECE

Harvard Associate, 9/2016 - now Cambridge MA

Harvard University, SEAS Affiliate

Visiting Research Scientist, 9/2016-12/2016 Mountain View CA

Google Research (Google Brain Team)

Postdoctoral Fellow, 9/2014-8/2016 Cambridge MA

Harvard University

Postdoctoral Fellow, 2/2014-9/2014 Providence RI

Brown University

Visiting Faculty, 7/2013-1/2014 Helsinki, Finland

Aalto University

**Ph.D. student**, 8/2010-5/2013 Pittsburgh PA

Carnegie Mellon University

Research intern, 9/2012-11/2012 Cambridge UK

Microsoft Research

Research intern, 6/2012-8/2012 Barcelona Spain

Yahoo! Research

**Ph.D.** student, 8/2007-5/2010 Pittsburgh PA

Carnegie Mellon University

Research associate, 9/2006-8/2007 Athens Greece

National Center of Scientific Research Demokritos

## 3 Education

#### Carnegie Mellon University (CMU)

Ph.D. Algorithms, Combinatorics and Optimization, 2010-2013

Dissertation: Mathematical and Algorithmic Analysis of Network and Biological Data [PDF]

Advisor: Alan M. Frieze

## Carnegie Mellon University (CMU)

M.S. Machine Learning, 2007-2010

Master Thesis: Data Mining with MapReduce: Graph and Tensor Algorithms with Applications [PDF]

Advisors: Gary L Miller, Russell Schwartz

#### National Technical University of Athens (NTUA)

Electrical and Computer Engineering, 2001-2006

Undergraduate thesis: An algorithm for Wrapper Verification

Advisor: Timos Sellis

## 4 Teaching Record

- Instructor
- CAS CS 131, Combinatoric Structures, Fall 2017, Fall 2018, Boston University
- CS 591 Data Analytics: Theory and Applications, Spring 2017, Boston University
- T-79.7003 Graphs and Networks, Fall 2013, Aalto University,
- Teaching Assistant
- 10701 and 15781 Machine Learning, Fall 2009 (graduate level)
- 21-257 Models and Methods for Optimization, Spring 2013 (undergraduate level)
- Guest Lectures
  - CS284r Social Data Mining, Harvard University 2014
  - 21-301 Combinatorics, CMU 2011
  - 15-826 Multimedia Databases and Data Mining, CMU 2010
  - TELCOM2125: Network Science and Analysis, University of Pittsburgh 2013

## 5 Publications

#### 5.1 Refereed Journals

- A. Dudek, A. M. Frieze, <u>C. E. Tsourakakis</u> (α β order)
   Rainbow Connection of Random Regular Graphs [PDF]
   SIAM Journal of Discrete Mathematics (accepted 2015, to appear)
- 2. C. Chen, H. Tong, B. A. Prakash, <u>C. E. Tsourakakis</u>, T.E. Rad, C. Faloutsos, D. Chau *Node Immunization on Large Graphs: Theory and Algorithms* [PDF] IEEE Transactions on Knowledge and Data Engineering (2015)

F. Bonchi, A. Gionis, F. Gullo, <u>C. E. Tsourakakis</u>, A. Ukkonen (α – β order)
 Chromatic Correlation Clustering [PDF]
 ACM Transactions on Knowledge Discovery from Data (2015)

A. M. Frieze, <u>C. E. Tsourakakis</u> (α – β order)
 Some Properties of Random Apollonian Networks, [PDF]
 Journal of Internet Mathematics (2014)

#### 5. C. E. Tsourakakis

Towards Quantifying Vertex Similarity in Networks [PDF] Journal of Internet Mathematics (2014)

R. Pagh, <u>C. E. Tsourakakis</u> (α – β order)
 Colorful Triangle Counting and a MapReduce Implementation [PDF]
 Information Processing Letters (2012)

M. N. Kolountzakis, G. L. Miller, R. Peng, <u>C. E. Tsourakakis</u> (α – β order)
 *Efficient Triangle Counting in Large Graphs via Degree-based Vertex Partitioning* [PDF]
 Journal of Internet Mathematics (2012)
 Invited as a best paper

8. A. M. Frieze, <u>C. E. Tsourakakis</u> ( $\alpha - \beta$  order) Rainbow Connection of Sparse Random Graphs [PDF] Electronic Journal of Combinatorics (2012)

9. U Kang, C. E. Tsourakakis, C. Faloutsos

PEGASUS: Mining Peta-Scale Graphs [PDF]

Knowledge and Information Systems Journal (2011)

Invited as a best paper

 C. E. Tsourakakis, M. N. Kolountzakis, G. L. Miller Triangle Sparsifiers [PDF]
 Journal of Graph Theory and Applications (2011)

11. <u>C. E. Tsourakakis</u>, R. Peng, M. A. Tsiarli, G. L. Miller, R. Schwartz

Approximation Algorithms for Speeding up Dynamic Programming and denoising aCGH data [PDF]

Journal of Experimental Algorithmics (2011)

12. U Kang, <u>C. E. Tsourakakis</u>, A. Appel, C. Faloutsos, J. Leskovec *HADI: Mining Radii of Large Graphs* [PDF]

ACM Transactions on Knowledge Discovery from Data (2011)

Invited as a best paper

13. <u>C. E. Tsouraka</u>kis

Counting Triangles Using Projections [PDF] Knowledge and Information Systems Journal (2010) Invited as a best paper

14. J. Sun, <u>C. E. Tsourakakis</u>, E. Hoke, C. Faloutsos, T. E. Rad

Two heads better than one: pattern discovery in time-evolving multi-aspect data [PDF]

Data Mining and Discovery Journal (2008)

Invited as a best paper

#### 5.2 Refereed Conferences

1. <u>C. E. Tsourakakis</u>, Michael Mitzenmacher, Kasper Green Larsen, Jarosaw Basiok, Ben Lawson, Preetum Nakkiran, Vasileios Nakos

Predicting Positive and Negative Links with Noisy Queries: Theory & Practice [PDF]
56th Annual Allerton Conference on Communication, Control, and Computing (Allerton 2018)

- C. E. Tsourakakis, Shreyas Sekar, Johnson Lam, Liu Yang Risk-Averse Matchings over Uncertain Graph Databases [PDF]
   European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECML-PKDD 2018)
- Rediet Abebe, Jon Kleinberg, David Parkes, C. E. Tsourakakis (α β order)
   Opinion Dynamics with Varying Susceptibility to Persuasion [PDF]

   24th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2018)
- Michael Mitzenmacher, C. E. Tsourakakis (α β order)
   Joint Alignment from Pairwise Differences with a Noisy Oracle [PDF]
   15th International Workshop on Algorithms and Models for the Web Graph (WAW 2018)
- 5. C. Musco, C. Musco, C. E. Tsourakakis ( $\alpha \beta$  order) Minimizing Polarization and Disagreement in Social Networks [PDF] International World Wide Web Conference (WWW 2018)
- C. E. Tsourakakis, J. Pachocki, M. Mitzenmacher Scalable motif-aware graph clustering [PDF] International World Wide Web Conference (WWW 2017)
- 7. C. E. Tsourakakis

Motif-Driven Graph Analysis [PDF]
54th Annual Allerton Conference on Communication, Control, and Computing (Allerton 2016)

- A. Mahmoody, <u>C. E. Tsourakakis</u>, E. Upfal (α β order)
   Scalable Betweenness Centrality Maximization via Sampling [PDF]
   ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2016)
- 9. J. Blasiok, C. E. Tsourakakis ( $\alpha \beta$  order) ADAGIO: Fast Data-aware Near-Isometric Linear Embeddings [PDF] IEEE International Conference on Data Mining (ICDM 2016)
- 10. C. E. Tsourakakis

Streaming Graph Partitioning for Large Distributed Graphs [PDF] ACM Conference On Online Social Networks (COSN 2015)

- 11. M. Mitzenmacher, J. Pachocki, R. Peng, C. E. Tsourakakis, S.C. Xu ( $\alpha \beta$  order) Scalable Large Near-Clique Detection in Large-Scale Networks via Sampling [PDF] ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2015)
- 12. <u>C. E. Tsourakakis</u>

The k-clique densest subgraph problem [PDF] International World Wide Web Conference (WWW 2015)

#### 13. C. E. Tsourakakis

Provably Fast Inference of Latent Features from Networks [PDF] International World Wide Web Conference (WWW 2015)

14. S. Bhattacharya, M. Henzinger, D. Nanongkai, C. E. Tsourakakis ( $\alpha - \beta$  order) Space- and Time-Efficient Algorithms for Maintaining Dense Subgraphs on One-Pass Dynamic Streams [PDF]

ACM Symposium on Theory of Computing (STOC 2015)

15. <u>C. E. Tsourakakis</u>, C. Gkantsidis, B. Radunovic, M. Vojnovic Fennel: Streaming Graph Partitioning for Massive Scale Graphs [PDF] ACM Web Search and Data Mining Conference (WSDM 2014) Research highlight of Microsoft Research

16. G. Nychis, <u>C. E. Tsourakakis</u>, P. Steenkiste, S. Seshan

Accurately Estimating Wireless Interference in Heterogeneous Environments [PDF]

IEEE Dynamic Spectrum Access Networks (DySPAN 2014)

#### 17. C. E. Tsourakakis

Modeling Intratumor Gene Copy Number Heterogeneity using Fluorescence in Situ Hybridization data [PDF]

Workshop on Algorithms in Bioinformatics (WABI 2013)

- 18. <u>C. E. Tsourakakis</u>, F. Bonchi, A. Gionis, F. Gullo, M. A. Tsiarli

  Denser than the densest subgraph: extracting optimal quasi-cliques with quality guarantees [PDF]

  ACM SIGKDD International Knowledge Discovery and Data Mining (KDD 2013)
- 19. A. M. Frieze, <u>C. E. Tsourakakis</u> ( $\alpha \beta$  order) Rainbow Connectivity of Sparse Random Graphs [PDF] International Workshop on Randomization and Computation (APPROX-RANDOM 2012)
- 20. A. M. Frieze, <u>C. E. Tsourakakis</u> ( $\alpha \beta$  order) On Certain Properties of Random Apollonian Networks [PDF] Workshop on Algorithms and Models for the Web Graph (WAW 2012) Invited to best papers of WAW 2012 issue
- 21. G. L. Miller, R. Peng, R. Schwartz, C. E. Tsourakakis (α β order) Approximate Dynamic Programming using Halfspace Queries and Multiscale Monge decomposition ACM-SIAM Symposium on Discrete Algorithms (SODA 2011)
- 22. <u>C. E. Tsourakakis</u> *MACH: Fast Randomized Tensor Decompositions* [PDF] SIAM International Conference on Data Mining (SDM 2010)
- 23. U Kang, <u>C. E. Tsourakakis</u>, A. Appel, C. Faloutsos, J. Leskovec

  Radius Plots for Mining Tera-byte Scale Graphs: Algorithms, Patterns, and Observations [PDF]

  SIAM International Conference on Data Mining (SDM 2010)

  Invited to best papers of IEEE ICDM 2009 issue
- 24. D. Tolliver, <u>C. E. Tsourakakis</u>, A. Subharmanian, S. Shackney, R. Schartz

  Robust Unmixing of Tumor States in Array Comparative Genomic Hybridization Data [PDF]

  International Conference on Intelligent Systems for Molecular Biology (ISMB 2010)

25. H. Tong, B. A. Prakash, <u>C. E. Tsourakakis</u>, T.E. Rad, C. Faloutsos, D. Chau *On the Vulnerability of Large Graphs* [PDF] IEEE International Conference on Data Mining (ICDM 2010)

26. M. N. Kolountzakis, G. L. Miller, R. Peng, <u>C. E. Tsourakakis</u> (α – β order) Efficient Triangle Counting in Large Graphs via Degree-based Vertex Partitioning [PDF] Workshop on Algorithms and Models for the Web Graph (WAW 2010) Invited to best papers of WAW 2010 issue

27. <u>C. E. Tsourakakis</u>, P. Drineas, E. Michelakis, I. Koutis, C. Faloutsos Spectral Counting of Triangles via Element-Wise Sparsification [PDF] Advances in Social Networks Analysis and Mining (ASONAM 2009)

Invited to the ASONAM 2009 special issue

28. <u>C. E. Tsourakakis</u>, U Kang, G. L. Miller, C. Faloutsos DOULION: Counting Triangles in Massive Graphs with a coin [PDF] ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2009)

29. U Kang, C. E. Tsourakakis, C. Faloutsos

PEGASUS: A Peta-Scale Graph Mining System - Implementation and Observations [PDF] IEEE International Conference on Data Mining (ICDM 2009)

Invited to best papers of IEEE ICDM 2009 issue, Best Application Runner Up Award, Silver Award in Open Source World Challenge, included in Hadoop for Windows Azure

30. C. E. Tsourakakis

Fast Counting of Triangles in Large Real Networks, without counting: Algorithms and Laws [PDF] IEEE International Conference on Data Mining (ICDM 2008)

Invited to the IEEE ICDM 2008 special issue

31. J. Sun, C. E. Tsourakakis, E. Hoke, C. Faloutsos, T. E. Rad

Two heads better than one: pattern discovery in time-evolving multi-aspect data [PDF]

European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD 2008)

Invited to the ECML-PKDD 2008 special issue

## 5.3 Book Chapters

1. C. E. Tsourakakis

Pegasus: Taming Massive Graphs with Hadoop

Advances in data processing techniques in the era of Big Data (CRC Press, to appear)

Invited book chapter

Invited book chapter

2. C. E. Tsourakakis

Large Scale Graph Mining With MapReduce: Counting Triangles in Large Real World Networks Graph Data Management: Techniques and Applications (IGI 2011)

Invited book chapter

3. C. E. Tsourakakis

Large Scale Graph Mining Using Mapreduce: Estimating The Diameter Of Massive Graphs And Radii Distributions

Social Network Analysis (IGI 2011)

#### Invited book chapter

4. <u>C. E. Tsourakakis</u>, P. Drineas, E. Michelakis, I. Koutis, C. Faloutsos Spectral Counting of Triangles via Element-Wise Sparsification Advances in Social Networks Analysis and Mining (Springer 2010)

## 5.4 Preprints

1. Jeremy G. Hoskins, Cameron Musco, Christopher Musco, C. E. Tsourakakis ( $\alpha - \beta$  order) Learning Networks from Random Walk-Based Node Similarities [PDF]

#### 5.5 Patents

• <u>C. E. Tsourakakis</u>, C. Gkantsidis, B. Radunovic, M. Vojnovic <u>Graph Partitioning for Massive Scale Graphs</u> Patent number 20140320497

#### 5.6 Tutorials

- A. Gionis, C. E. Tsourakakis (α β order)
   Dense Subgraph Discovery (DSD)
   [Slides in PDF], [Youtube, part I], [Youtube,part II]
   ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2015)
- A. M. Frieze, A. Gionis, <u>C. E. Tsourakakis</u> (α β order)
   Algorithmic techniques for modeling and mining large graphs (AMAzING) [Slides in PDF]
   The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD 2013)
- A. M. Frieze, A. Gionis, <u>C. E. Tsourakakis</u> (α β order)
   Algorithmic techniques for modeling and mining large graphs (AMAzING) [Slides in PDF]
   ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2013)
- C. Faloutsos, G. L. Miller, <u>C. E. Tsourakakis</u> (α β order)
   Large Graph-Mining: Power Tools and a Practitioner's Guide
   [Slides in PDF], [Slides in PTT]
   ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2009)

## 6 Presentations

#### 6.1 Invited talks

- Dagstuhl Seminar "High-Performance Graph Algorithms", June 2018
- SIAM Conference on Discrete Mathematics, Mining and Modeling Network Data [MMND 2018], June 2018
- Foundation for Research and Technology, April 2018
- University of Cyprus, March 2018
- Aalto University, March 2018

- University of Helsinki, March 2018
- Aarhus University, Aarhus, March 2018
- BARC, Copenhagen, March 2018
- ECE Seminar, Northeastern University, November 2017
- Theory Seminar, Boston University, September 2017
- Data Science Seminar, Boston University, September 2017
- Legendary Entertainment, Boston, August 2017
- 2017 SIAM Annual Meeting, July 2017
- GraphEx 2017, May 2017
- Information Theory and Applications Workshop ITA, February 2017
- Allerton Conference, September 2016
- Aarhus University, April 2016
- IT Copenhagen University, April 2016
- UC Santa Cruz University, March 2016
- ETH Zurich, March 2016
- University of Illinois Urbana-Champaign, February 2016
- Boston University, February 2016
- University Colorado-Boulder, February 2016
- Northeastern University, January 2016
- University of Maryland, December 2015
- Ohio State University, November 2015
- IBM Research Yorktown Heights, November 2015
- Google Research Mountain View, November 2015
- Stanford's RAIN seminar, November 2015
- University of Illinois Urbana-Champaign, October 2015
- EconCS Seminar at Harvard University, September 2015
- Data Driven Algorithmics, Harvard University, September 2015
- Mathematics in Data Science, Brown ICERM, July 2015
- 6th annual Graph Exploitation Symposium (GraphEx), MIT Lincoln Laboratory, July 2015
- University of Cyprus, June 2015 [Video]
- Pompeu Fabra University, May 2015
- Draper Lab MIT, December 2014
- NII Shonan Meeting entitled "Algorithms for Large-Scale Graphs", October 2014
- MIT Lincoln Laboratory Graph Exploitation Symposium, August 2014
- Brown University, May 2014
- Google Research NYC, April 2014
- Imperial College London, May 2014
- Aalto Science Institute Talks, January 2014
- Brown University, April 2013

- Canadian Mathematical Society, December 2011
- SIAM Conference on Computational Science and Engineering (CSE11), February 2011
- Rensselaer Polytechnic Institute, November 2008

## 6.2 Talks (Conferences/Symposia)

- Scalable Large Near-Clique Detection in Large-Scale Networks via Sampling [Video]
   ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), August
   2015
- Scalable dense subgraph discovery Random Structures and Algorithms (RSA), July 2015
- Scalable dense subgraph discovery International Symposium on Optimization (ISMP), July 2015
- Space- and Time-Efficient Algorithms for Maintaining Dense Subgraphs on One-Pass Dynamic Streams 47th ACM Symposium on Theory of Computing (STOC), June 2015
- Provably Fast Inference of Latent Features from Networks 24th International World Wide Web Conference (WWW), May 2015
- The k-clique Densest Subgraph Problem 24th International World Wide Web Conference (WWW), May 2015
- Algorithmic Analysis of Large Datasets [Video] Harvard University, November 2014
- Modeling Intratumor Gene Copy Number Heterogeneity using Fluorescence in Situ Hybridization data Algorithms in Bioinformatics (WABI) 13, September 2013
- Fennel: Streaming Graph Partitioning for Massive Scale Graphs MASSIVE 2013, September '13, Nice, France
- Denser than the densest subgraph: extracting optimal quasi-cliques with quality guarantees [Video] ACM SIGKDD Knowledge Discovery and Data Mining (KDD) August 2013, Chicago
- Processing, Analyzing and Mining Big Graph Data [Video] Machine learning lunch seminar, April 2013
- Fennel: Streaming Graph Partitioning for Massive Scale Graphs Microsoft Research, November 2012, Cambridge UK
- On Certain Topics on Networks and Optimization: Theorems, Algorithms and Applications Yahoo! Research, August 2012
- High Degree Vertices, Eigenvalues and Diameter of Random Apollonian Networks

  15th International Conference on Random Structures and Algorithms (RSA), May 2011, Atlanta
- Approximate Dynamic Programming using Halfspace and Multimonge Decomposition Symposium on Discrete Algorithms (SODA), January 2011
- Efficient Triangle Counting in Large Graphs via Degree Based Vertex Partitioning ACO Seminar, CMU, January 2011
- Approximate Dynamic Programming Using Halfspace Queries and Multiscale Monge Decomposition and Denoising aCGH data
   ACO Seminar, CMU, January 2011
- Efficient Triangle Counting in Large Graphs via Degree Based Vertex Partitioning Machine Learning Seminar, CMU, January 2011

- Approximate Dynamic Programming Using Halfspace Queries and Multiscale Monge Decomposition and Denoising aCGH data
  - Machine Learning Seminar, CMU, January 2011
- Spectral Counting of Triangles in Power-Law Networks via Element-Wise Sparsification Advances in Social Networks Analysis and Mining, Athens, 2009
- DOULION: Counting Triangles in Massive Graphs with a Coin [Video]

  ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2009
- PEGASUS: Mining Peta-Scale Graphs Database lab, CMU
- Fast Counting of triangles in large networks: Algorithms and laws IEEE International Conference on Data Mining, (ICDM) 2008
- Fast Counting of triangles in large networks: Algorithms and laws Theory Seminar of Rensselaer Polytechnic Institute, November 2008
- Two heads better than one: pattern discovery in time-evolving multi-aspect data European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (ECML-PKDD) 2008

### 7 Students

I have mentored the following students:

- Tianyi Chen (MSc, BU), project on Uncertain Graph Databases
- Ben Lawson (senior, BU), project on Predicting Signed Edges
- Johnson Lam (senior, BU), project on Hypergraph matchings
- Rediet Abebe (grad student, Cornell), project on Opinion Dynamics and Varying Susceptibility to Persuasion

### 8 Public and Professional Service

#### 8.1 Senior Program Committees

I am/have been a senior program committee member of the following program committees, listed in reverse chronological order.

- International World Wide Web conference (WWW 2018, Social Networks Track)
- International Joint Conference on Artificial Intelligence (IJCAI 2017)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2017)

## 8.2 Program Committees

I am/have been a member of the following program committees, listed in reverse chronological order.

- International World Wide Web conference (WWW 2019)
- International Conference on Very Large Data Bases (PVDLB 2019)
- International Conference on Artificial Intelligence and Statistics (AISTATS 2019)
- Conference on Neural Information Processing Systems (NIPS 2018)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2018)

- International Conference on Machine Learning (ICML 2018)
- International World Wide Web conference (WWW 2018, 2 tracks)
- International AAAI Conference on Web and Social Media (ICWSM-18)
- International Conference on Web Search and Data Mining (WSDM 2018)
- SIAM Workshop on Network Science (NS 2018)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2017)
- International Joint Conference on Artificial Intelligence (IJCAI 2017)
- International World Wide Web conference (WWW 2017)
- Conference on Neural Information Processing Systems (NIPS 2017)
- International Conference on Web Search and Data Mining (WSDM 2017)
- International AAAI Conference on Web and Social Media (ICWSM-17)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2016)
- International World Wide Web conference (WWW 2016)
- ACM International Conference on Web Search and Data Mining (WSDM) 2016
- Big Data 2015
- Conference on Information and Knowledge Management (CIKM 2015)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2015)
- European Symposium of Algorithms (ESA 2015)
- International World Wide Web conference (WWW 2015)
- Conference on Information and Knowledge Management (CIKM 2014)
- International World Wide Web conference (WWW 2014)
- 8th International AAAI Conference on Weblogs and Social Media (ICWSM 2014)
- 2nd Workshop on Large-scale Data Mining: Theory and Applications (LDMTA 2010)

#### 8.3 Grant Proposals' Reviewer

- Invited by the Research Foundation Flanders to review scientific grant proposals (2018).
- Invited by the French Science Foundation to review scientific grant proposals (2018).
- NSF Grant proposal reviewer (2015, 2018)
- Invited by the Czech Science Foundation to review scientific grant proposals (2014).

#### 8.4 Books' Reviewer

I have reviewed submitted books for the following selected university presses.

- 1. MIT Press
- 2. Cambridge University Press

#### 8.5 Journal Reviews

I am a reviewer for the following journals.

• Annals of Statistics

- Proceedings of the National Academy of Sciences (PNAS)
- American Mathematical Society (AMS)
- Theoretical Computer Science Journal (TCS)
- Random Stuctures and Algorithms (RSA)
- Elsevier Parallel Computing
- SIAM Journal of Scientific Computing
- Computational Statistics Journal
- Journal of Discrete Mathematics
- Journal of Applied Probability
- Internet Mathematics
- IEEE Transactions on Image Processing
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- Optimization Methods and Software
- ACM Journal of Experimental Algorithms
- Data Mining and Knowledge Discovery (DAMI)
- ACM Transactions on Knowledge Discovery from Data (TKDD)
- ACM Transactions on Database Systems On-line (TODS)
- Journal of Knowledge and Information Systems (KAIS)
- Elsevier International Journal Knowledge-Based Systems
- Elsevier Computer Networks Journal
- IEEE Transactions on Network Science and Engineering (TNSE)
- Journal of Selected Topics in Signal Processing (J-STSP)

#### 8.6 Conference Reviews

I have reviewed several papers from the following conferences. I am a frequent reviewer for the conferences annotated with a star (\*).

- Workshop on Algorithms and Data Structures (WADS)
- Workshop on Algorithms and Models for the Web Graph (WAW\*)
- European Symposium on Algorithms (ESA\*)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD\*)
- International World Wide Web conference (WWW\*)
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD\*)
- Annual International Conference on Research in Computational Molecular Biology (RECOMB)
- Combinatorial Pattern Matching (CPM)
- Very Large Data Bases Conference (VLDB\*)
- Symposium of Discrete Algorithms (SODA\*)
- Foundations of Computer Science (FOCS)
- Symposium on the Theory of Computing (STOC\*)

- Principles of Database Systems (PODS\*)
- International Symposium of Distributed Computing (DISC)

## 9 Miscellaneous

## 9.1 Management, Administrative and other Relevant Activities

Throughout my Ph.D. and also during my postdoc I have been an active community member. I participated in social events, organized reading groups, and devoted a lot of energy to the recruitment process of prospective students. A list of these activities with dates follows.

- Organized a reading group on Big Data, Graphs, and Learning at Boston University, summer 2017
- Co-organized workshop on *Networks*, *Big Data and Machine Learning* with Prof. Olgica Mileknovic at the 54th Annual Allerton Conference on Communication, Control (Allerton 2016)
- Organized a workshop at Harvard University with a distinguished panel of speakers who answered questions related to "postdoc professional development".
- Member of Welcome Committee for ACO prospective students, CMU 2012
- Member of Welcome Committee for ACO prospective students, CMU 2011
- Member of Welcome Committee for the Machine Learning Department's prospective students 2010 [Slides]
- Member of Welcome Committee, Machine Learning Department, CMU 2009
- Organizer of the Spectral Graph Theory Reading Group, CMU 2008-09
- Co-Organizer of the Manifold Reading Group [URL], 2008-2010
- Co-Organizer of Social Events for the Machine Learning Department 2009
- Co-Organizer of the First Machine Learning Department Symposium 2009
- Hadoop administrator in the CMU Database Lab 2008-09

#### 9.2 Programming Skills

- C, C++, Java, Python, Julia, Perl, Rust, Matlab, SQL, Prolog, Lisp
- Software development using a 4000 node Hadoop cluster in the Yahoo! M45 supercomputer.
- Big data programming using Apache Giraph and Apache Spark.

I have programming experience outside academia too. As a research associate at NCSR Demokritos, I developed product-level code for a database deployed as a Web service that was used for real-time search and rescue operations performed by German firefighters (project SHARE).

#### 9.3 Languages

- English (Cambridge Proficiency, Michigan Proficiency)
- German (Kleines Deutsches Sprachdiplom)
- French (DELF)
- Greek (mother tongue)

#### 9.4 Awards

- Best paper award for the "PEGASUS: A Peta-Scale Graph Mining System - Implementation and Observations" at IEEE ICDM 2009

- Scholarships from the Greek National Foundation (2001-2006)
- Minoan Lines Scholarship (2002)
- Kotsovolos Scholarship (2002)
- Scholarship from Australian Embassy (2002)
- 3rd Panhellenic award in the mathematical contest organized by Hellenic Mathematical Society (2000)
- 1st Panhellenic award in the mathematical contest organized by Hellenic Mathematical Society (1998)
- Distinctions at Hellenic Mathematical Society (1996,1997)