Charalampos E. Tsourakakis

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Education

Carnegie Mellon University

Ph.D. in **Algorithms, Combinatorics and Optimization** *September 2010 - May 2013*

- Dissertation: *Mathematical and Algorithmic Analysis of Network and Biological Data* [PDF]
- Advisor: Prof. Alan Frieze

Carnegie Mellon University

M.S in **Machine Learning** *September 2007 - May 2010*

- Master Thesis: *Data Mining with MapReduce: Graph and Tensor Algorithms with Applications* [PDF]
- Advisors: Prof. Christos Faloutsos, Prof. Gary L Miller, Prof. Russell Schwartz

NTUA

Dipl. Eng. in **Electrical and Computer Engineering** *September 2001 - May 2006*

- Undergraduate thesis: *A machine learning algorithm for Wrapper Verification*
- Supervisors: Prof. Timos Sellis, Dr. Georgios Paliouras

Appointments

1/2018 - now	**Assistant Professor** Department of Electrical and Computer Engineering	*Boston University*
1/2017 - now	**Assistant Professor** Department of Computer Science	*Boston University*
9/2016 - now	**Faculty Affiliate** School of Engineering and Applied Sciences	*Harvard University*
9/2016 - 12/2016	**Visiting Research Scientist** Google Brain	*Google Research*
9/2014 - 8/2016	**Postdoctoral Fellow** School of Engineering and Applied Sciences	*Harvard University*
2/2014-8/2014	**Postdoctoral Fellow** ICERM	*Brown University*
9/2006-8/2007	**Research Scientist** Greek National Center of Scientific Research	*Demokritos*

Selected Publications (recent)

ECML-PKDD 2018	*Risk Averse Team Formation from Uncertain Hypergraphs* , Charalampos E. Tsourakakis, Shreyas Sekar, Johnson Lam and Liu Yang
KDD 2018	*Opinion Dynamics with Varying Susceptibility to Persuasion*, Rediet Abebe, Jon Kleinberg, David Parkes, Charalampos E. Tsourakakis
Allerton 2018	*Predicting Positive and Negative Links with Noisy Queries: Theory & Practice*, Charalampos E. Tsourakakis, Michael Mitzenmacher, Kasper Green Larsen, Jarosaw Basiok, Ben Lawson, Preetum Nakkiran, Vasileios Nakos
WWW 2018	*Minimizing Polarization and Disagreement in Social Networks*, Cameron Musco, Christopher Musco, Charalampos E. Tsourakakis
WWW 2017	*Scalable Motif Aware Clustering*, Charalampos E. Tsourakakis, Jakub Pachocki, Michael Mitzenmacher
KDD 2016	*Scalable Betweenness Centrality Maximization via Sampling*, Ahmad Mahmoody, Charalampos E. Tsourakakis, Eli Upfal
ICDM 2016	*Adagio: Fast Data-Aware Near-Isometric Linear Embeddings*, Jarosław Błasiok, Charalampos E. Tsourakakis
SIAM J. Discrete Math.	*Rainbow Connection of Random Regular Graphs*, Andrzej Dudek, Alan M. Frieze, Charalampos E. Tsourakakis (2015)
KDD 2015	*Scalable Large Near-Clique Detection in Large-Scale Networks via Sampling*, Michael Mitzenmacher, Jakub Pachocki, Richard Peng, Charalampos E. Tsourakakis, Shen Chen Xu
WWW 2015	Charalampos E. Tsourakakis. *The K-clique Densest Subgraph Problem*
WWW 2015	Charalampos E. Tsourakakis. *Provably Fast Inference of Latent Features from Networks*
STOC 2015	*Space- and Time-Efficient Algorithm for Maintaining Dense Subgraphs on One-Pass Dynamic Streams*, Sayan Bhattacharya, Monika Henzinger, Danupon Nanongkai, Charalampos E. Tsourakakis
WSDM 2014	*Fennel: Streaming Graph Partitioning for Massive Scale Graphs*, Charalampos E. Tsourakakis, C. Gkantsidis, B. Radunovic, M. Vojnovic
KDD 2013	*Denser than the densest subgraph: extracting optimal quasi-cliques with quality guarantees*, Charalampos E. Tsourakakis, F. Bonchi, A. Gionis, F. Gullo, M. A. Tsiarli

Selected Invited Talks (recent)

June 2018	Dagstuhl Seminar on High-Performance Graph Algorithms
June 2018	SIAM Conference on Discrete Mathematics
March 2018	University of Copenhagen (Basic Algorithms Research Copenhagen)
August 2017	Legendary Entertainment
May 2017	GraphEx 2017
February 2017	Information Theory and Applications Workshop
September 2016	Allerton Conference
March 2016	ETH Zurich
February 2016	University of Illinois Urbana-Champaign
September 2015	Workshop on Data Driven Algorithmics, Harvard University

Patents

Patent # 20140320497	*Graph Partitioning for Massive Scale Graphs* (result of my research at Microsoft Research)

Coding

Primary	C++, Java, Python
Big Data	Hadoop, Apache Giraph, Tensorflow
Familiar	Julia, Perl, Rust, Matlab, SQL, Prolog, Lisp, Mathematica

Teaching Experience

Fall 2017 & Fall 2018	CAS CS 131 Combinatoric Structures, Boston University
Spring 2017	CS 591 Data Analytics: Theory and Applications, Boston University
Fall 2013	T-79.7003 Graphs and Networks, Aalto University

Service/Awards/Other

PC member	ICML 2018, KDD 2018, ICWSM 2018, WWW 2018 (3 Tracks), WWW 2017 (2 Tracks), WSDM 2018, NIPS 2017, WSDM 2017, ICWSM 2017, KDD 2016, WWW 2016, WSDM 2016, CIKM 2015, KDD 2015, ESA 2015, WWW 2015, CIKM 2014, WWW 2014, ICWSM 2014, LDMTA 2010
Reviewer	Proceedings of the National Academy of Sciences (PNAS), American Mathematical Society (AMS), Random Stuctures and Algorithms (RSA), Very Large Data Bases Conference (VLDB), Symposium of Discrete Algorithms (SODA), Foundations of Computer Science (FOCS), Symposium on the Theory of Computing (STOC), IEEE Transactions on Big Data, ACM Transactions on Database Systems (TODS)
Awards	Best paper award (IEEE ICDM 2009), Greek National Foundation scholarships (2001-2006), Minoan Lines Scholarship (2002), Scholarship from Australian Embassy (2002), Kotsovolos Scholarship (2002), Distinctions at Hellenic Mathematical Society (1996,1997), 1st Panhellenic award in the mathematical contest organized by Hellenic Mathematical Society (1998), 3rd Panhellenic award in the mathematical contest organized by Hellenic Mathematical Society (2000)
Languages	English (Cambridge, and Michigan Proficiency), German (Kleines Deutsches Sprachdiplom), French (DELF), Greek (native speaker)