Curriculum Vitae

Thanasis Lianeas

Personal Info

Full Name	Athanasios V. Lianeas
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Education

2015-2018	Postdoctoral Researcher, Electrical and Computer Engineering, Cockrell School of Engineering, University of Texas at Austin, supervised by Prof. Evdokia Nikolova.
2009-2014	PhD in Computer Science, School of Electrical and Computer Engineering, National Technical University of Athens, supervised by Prof. Dimitris Fotakis and Prof. Stathis Zachos, Thesis: "Congestion Games: Stochastic Extensions and Techniques for Reducing the Price of Anarchy"
2007-2009	Graduate Diploma (MSc.), "Graduate Program in Logic, Algorithms and Computation", co-organized by the National Technical University of Athens, the University of Athens and the University of Patras. GPA: 8.7/10. Thesis: "Undirected Graph Connectivity in Logspace", grade 10/10, supervised by Prof. Stathis Zachos
2001-2007	Diploma (BSc., MSc.), School of Applied Mathematical and Physical Sciences, National Technical University of Athens (N.T.U.A.). GPA: 8.22/10. Thesis: "Conflict-free Colorings", grade 10/10, supervised by Prof. Stathis Zachos

Research Interests

Game Theory	Interested in Congestion Games, their special cases or extensions that better model real life situations. A recent direction I have followed additionally assumes selfish resources' operators which gives rise to many interesting questions.
Algorithms & Optimization	I have been engaging with questions related to Local Search, PLS and Smooth Complexity, Online Learning and Learning Dynamics, and problems arising in Power Flow Networks, where in fact, there is lack of theoretical justifications.
Machine Learning in Exercise Science	Using Machine Learning for predicting an athlete's performance or a match's outcome, and for estimating important metrics (e.g., VO2max, the anaerobic threshold, etc.) using only training data.

Conference Publications

2020 *No-Regret Learning and Mixed Nash Equilibria: They Do Not Mix.*
Lampros Flokas, Emmanouil-Vasileios Vlatakis-Gkaragkounis, Thanasis Lianeas, Panayotis Mertikopoulos, Georgios Piliouras. Neural Information Processing Systems (spotlight, NeurIPS '20).

- *Efficient Online Learning of Optimal Rankings: Dimensionality Reduction via Gradient Descent.*
Dimitris Fotakis, Thanasis Lianeas, Georgios Piliouras, Stratis Skoulakis. Neural Information Processing Systems (NeurIPS '20).

- *Node Max-Cut and Computing Equilibria in Linear Weighted Congestion Games.*
Dimitris Fotakis, Vardis Kandiros, Thanasis Lianeas, Nikos Mouzakis, Panagiotis Patsilinakos, Stratis Skoulakis.
International Colloquium on Automata, Languages and Programming (ICALP '20).

2018 *Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators.*
José Correa, Cristóbal Guzmán, Thanasis Lianeas, Evdokia Nikolova, Marc Schröder.
Economics and Computation (EC '18).

- *When Does Diversity of User Preferences Improve Outcomes in Selfish Routing?*
Richard Cole, Thanasis Lianeas, Evdokia Nikolova.
International Joint Conference on Artificial Intelligence (IJCAI '18).

- *A Submodular Approach for Electricity Distribution Network Reconfiguration.*
Ali Khodabakhsh, Ger Yang, Soumya Basu, Evdokia Nikolova, Michael C. Caramanis, Thanasis Lianeas, Emmanouil Pountourakis.
Hawaii International Conference on System Sciences (HICSS '18).

2017 *Reconciling Selfish Routing with Social Good.*
Soumya Basu, Yitao Chen, Thanasis Lianeas, Evdokia Nikolova, Ger Yang.
Symposium on Algorithmic Game Theory (SAGT '17).

2016 *Asymptotically Tight Bounds for Inefficiency in Risk-Averse Selfish Routing.*
Thanasis Lianeas, Evdokia Nikolova, Nicolás E. Stier-Moses.
International Joint Conference on Artificial Intelligence (IJCAI '16).

2015 *New Complexity Results and Algorithms for the Minimum Tollbooth Problem.*
Soumya Basu, Thanasis Lianeas, Evdokia Nikolova.
Web and Internet Economics (WINE '15).

- *Improving Selfish Routing for Risk-Averse Players.*
Dimitris Fotakis, Dimitris Kalimeris, Thanasis Lianeas.
Web and Internet Economics (WINE '15).

2013 *Stochastic Congestion Games with Risk-Averse Players.*
Haris Angelidakis, Dimitris Fotakis, Thanasis Lianeas.
Symposium on Algorithmic Game Theory (SAGT '13).

- *Resolving Braess's Paradox in Random Networks.*
Dimitris Fotakis, Alexis C. Kaporis, Thanasis Lianeas, Paul G. Spirakis.
Web and Internet Economics (WINE '13).

2012 *On the Hardness of Network Design for Bottleneck Routing Games.*
Dimitris Fotakis, Alexis C. Kaporis, Thanasis Lianeas, Paul G. Spirakis.
Symposium on Algorithmic Game Theory (SAGT '12).

Journal Publications

2020	*Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators.* José Correa, Cristobál Guzmán, Marc Schröder, Thanasis Lianeas, Evdokia Nikolova. Operations Research (OR '20)
-	*Improving Selfish Routing for Risk-Averse Players.* Dimitris Fotakis, Dimitris Kalimeris, Thanasis Lianeas. Theory of Computing Systems (ToCS '20).
2019	*Risk-Averse Selfish Routing.* Thanasis Lianeas, Evdokia Nikolova, Nicolás E. Stier-Moses. Mathematics of Operations Research (Math of OR '19).
2017	*Resolving Braess's Paradox in Random Networks.* Dimitris Fotakis, Alexis C. Kaporis, Thanasis Lianeas, Paul G. Spirakis. Algorithmica (Algorithmica '17).
2014	*On the Hardness of Network Design for Bottleneck Routing Games.* Dimitris Fotakis, Alexis C. Kaporis, Thanasis Lianeas, Paul G. Spirakis. Theoretical Computer Science (TCS '14).

Teaching Experience

2018-...	Lecturer for the courses: "Discrete Mathematics" (Spring '18), "Advanced Algorithms" (Spring '21), "Algorithms & Complexity" (graduate, Fall '18, '19, '20), "Algorithmic Game Theory" (graduate, Spring '20, '21), School of Electrical and Computer Engineering, N.T.U.A., "Data Structures"(Spring '20), "Graph Theory" (Spring '20), School of Applied Mathematical and Physical Sciences, N.T.U.A., and "Operations Research" (Spring '19) and "Special Topics in Operations Research" (Fall '18,'19,'20), Department of Informatics, Athens University of Economics and Business (A.U.E.B.).
2015-2017	Individual lectures for the courses "Algorithms and Complexity" (undergraduate) and "Approximation Algorithms" (graduate), Electrical and Computer Engineering, University of Texas at Austin
2009-2014	TA for the undergraduate course "Algorithms and Complexity", School of Electrical and Computer Engineering, N.T.U.A.
2007-2014	Supporting the laboratory-exercises part of the course "Introduction to Programming", School of Electrical and Computer Engineering, N.T.U.A.
2010-2012	TA for the undergraduate course "Introduction to Computer Science", School of Electrical and Computer Engineering, N.T.U.A.
2009-2010	TA for the graduate courses "Theoretical Computer Science I: Algorithms and Complexity" and "Theoretical Computer Science II: Algorithmic Game Theory", School of Electrical and Computer Engineering, N.T.U.A.
2006-2014	Tutoring undergraduate students for the courses "Algorithms and Complexity" and "Introduction to Computer Science" and for Mathematics, Physics and Mechanics.

Invited Talks

2020	Singapore University of Technology and Design, Singapore, Mar '20.
2019	Athens Colloquium on Algorithms and Complexity, Aug '19.
2017	Yahoo Research, New York, Dec '17.
-	Informs Annual Meeting, Houston, Oct '17
-	Information Theory and Applications Workshop, San Diego, Feb '17
2016	Algorithmic Game Theory in Athens, Jun '16
2015	Simons Institute for the Theory of Computing, Berkeley, Fall semester '15
-	Athens Colloquium on Algorithms and Complexity, Aug '15
-	International Symposium on Mathematical Programming, Pittsburgh, July '15

Work Experience

2018-...	Lecturer, School of Electrical and Computer Engineering, N.T.U.A., and Department of Informatics, A.U.E.B.
2020-...	Postdoctoral Researcher, project "Beyond Worst-Case Analysis in Approximation Algorithms and Mechanism Design" financed by the Hellenic Foundation for Research and Innovation
2015-2018	Postdoctoral Researcher, NSF grant numbers CCF-1216103, CCF-1350823 and CCF-1331863, University of Texas at Austin.
2012-2014	PhD Researcher, project Algorithmic Game Theory, co-financed by the European Union and Greek national funds. Research Funding Program: THALES, investing in knowledge society through the European Social Fund
2009-2011	PhD Researcher, Basic Research Grant: Resource allocation to selfish users using game-theoretic models, N.T.U.A.
2012-...	(sub-)Reviewer for Conference on Neural Information Processing Systems ('21), International Conference on Autonomous Agents and Multi-Agent Systems ('21), International Joint Conferences on Artificial Intelligence ('21), Conference on Web and Internet Economics ('15,'16,'19,'20),Mathematics of Operations Research ('19), Algorithmica ('17, '18), Mathematical Foundations of Computer Science ('18), AAAI Conference on Artificial Intelligence ('17), ACM Conference on Economics and Computation ('17), International Colloquium on Automata, Languages and Programming ('15,'16), International Conference on Algorithms and Complexity ('17), International World Wide Web Conference ('17), Operations Research ('16), Symposium on Algorithmic Game Theory ('15, '20), Mathematical Programming series A and B ('15), Transportation Research part B ('14), International Symposium on Combinatorial Optimization ('12).

Other Interests

Music	Member of N.T.U.A. CoReLab's band "Great Thirds" and Austin's "Garlic Beets" band, amateur Violinist.
Sports	Diploma from the Faculty of Physical Education and Sport Science of the University of Athens (2008-2013). Fan of doing any Sport.

References

Richard Cole	Silver Professor of Computer Science of the Courant Institute of Mathematical Sciences at New York University. https://cs.nyu.edu/cole/ e-mail: cole@cs.nyu.edu
José Correa	Professor of Operations Research at the Department of Industrial Engineering of the University of Chile. https://www.dii.uchile.cl/~jcorrea/ e-mail: correa@uchile.cl
Dimitris Fotakis	Associate Professor at the School of Electrical and Computer Engineering of the National Technical University of Athens. https://www.softlab.ntua.gr/~fotakis/ e-mail: fotakis@cs.ntua.gr
Evdokia Nikolova	Assistant Professor at the Department of Electrical and Computer Engineering of the Cockrell School of Engineering of the University of Texas at Austin. http://users.ece.utexas.edu/~nikolova/ e-mail: nikolova@austin.utexas.edu
Nicolas Stier-Moses	Co-Director of Facebook Core Data Science. https://sites.google.com/site/nicostier/home, e-mail: nicostier@yahoo.edu
Stathis Zachos	Professor at the School of Electrical and Computer Engineering of the National Technical University of Athens. e-mail: zachos@cs.ntua.gr