

Luciano Gualà's Curriculum vitae

Personal information and education. Luciano Gualà was born in Giulianova (TE) on October 24th 1978. He received the Master Degree (cum laude) in Computer Science from the University of L'Aquila in 2003. He received the Ph.D. in Theoretical Computer Science and Applications from the University of L'Aquila, discussing a thesis on "Algorithmic Mechanism Design for Network Optimization Problems", in 2006. In 2006, he got a position as Assistant Professor at University of Rome "Tor Vergata", where he has been teacher for several courses for master and graduated students.

Teaching activities . Since 2006, he has been teacher for several courses for master and graduated students like, Algorithm and data structures, Distributed algorithms and complex networks, Digital logic circuits, Computer Architecture. In January 2018, he gave a lecture for PhD students at Department of Enterprise Engineering on Bitcoin and Blockchain technology.

Research and PhD thesis supervisor activities. He has been a supervisor of dozens of research thesis on algorithms some of which became papers presented at international conferences and/or published on international scientific journals. He co-advised (together with prof. Guido Proietti) Stefano Leucci's PhD thesis titled "On the quality of shortest paths on dynamic and autonomous networks".

Research activity. His research interests include: *Algorithmic Game Theory*, with particular emphasis on network formation games and the design and analysis of truthful mechanisms for network problems; *Fault tolerance*, with particular emphasis on graph spanners, distance sensitivity oracles, and efficient swap edge computation; *Approximation algorithms* for graph optimization problems; *Computational aspects of games and puzzles*.

He is author of about fifty publications on international journals and conferences with referee.

Visiting and scientific collaborations. From June to September 2005 he has been a visiting Ph.D. student at ETH of Zurich, where he worked on algorithmic game theory with the research group of Peter Widmayer. In June 2008, he has been a visiting researcher at the University of Liverpool, UK where he worked on computational aspects of Stackelberg games with the research group of Piotr Krysta. In Jun 2014 e June 2016 he has been a visiting researcher at the University of Sassari where he worked on network creation games and distance oracles with prof. Davide Bilò. In September 2017 he has been a visiting researcher at ETH of Zurich, where he worked on network fault tolerance with the research group of Peter Widmayer.

Program Committees and reviewer activities. He has been a member of the Program Committee of the 14th Workshop on Approximation and Online Algorithms - WAOA 2016. He has been reviewer of several papers submitted to relevant journals and conferences in theoretical computer science: STACS, WINE, SIROCCO, MFCS, ICALP, SEA, WAOA, WADS, FOMC, ALGOSENSORS, FCT, ICTCS, SAGT, DISC,

CIAC, DCOSS, Journal of Combinatorial Optimization, Theoretical Computer Science (TCS).

National and International Projects. From 2010 to 2012, he participated in the national COFIN Project named COGENT (PRIN 2008). Since 2013 he participates in the National COFIN “Algorithms for Techno-Mediated Social Networks (ARS TechnoMedia)” (PRIN 2010).

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D. Bilò, L. Gualà, G. Proietti:
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Bejeweled, Candy Crush and other match-three games are (NP-)hard. *CIG 2014*: 1-8.

Davide Bilò, Luciano Gualà, Stefano Leucci, Guido Proietti:
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