Antonio Di Stasio

Personal Information

Name & Surname	Antonio Di Stasio
email	antonio.distasio AT cs.ox.ac.uk
Person Webpage	antoniodistasio.github.io
Google Scholar	https://scholar.google.com/citations?user=qnH_-7AAAAAJ&hl=en
DBLP	https://dblp.org/pid/157/8638.html

Education Degrees

Date (from - to)	November 2015 - February 2019
Qualification	Doctorate (Ph.D.)
Field	Mathematical and Computer Science
Institute	University of Naples "Federico II", Italy
Supervisor	Prof. Aniello Murano

Date (from - to)	2011 - 2015
Degree	Master Degree in Computer Science (Class LM-18)
Institute	University of Naples "Federico II", Italy
Obtained on	March 16th, 2015
Final mark	110/110 cum laude
Thesis	An Accelerated Algorithm for log-color parity games
Supervisor	Prof. Aniello Murano

Former Positions

Date (from - to)	November 5, 2017 - May 21, 2018
Qualification	Visiting Scholar
Department	Department of Computer Science
Institute	Rice University, Houston, Texas, USA
Supervisor	Prof. Moshe Y. Vardi

Research Interests

Topics	Game Theory, Parity Games, Formal Aspects of System Specification, Verification, Synthesis, and Automated Planning, Artificial Intelligence.

Experiences

Date (from - to) Jan 3, 2023 - present
Qualification Senior Research Associate
Project Advanced ERC "WhiteMech"
Institute Department of Computer Science, University of Oxford
Advisor Prof. Giuseppe De Giacomo

Date (from - to) July 1, 2020 - Dec 2022
Qualification Post-doctoral researcher
Project Advanced ERC "WhiteMech"
Institute DIAG, Sapienza University of Rome
Advisor Prof. Giuseppe De Giacomo

Date (from - to) June 1, 2019 - May 31, 2020
Qualification Post-doctoral researcher
Project Methods and techniques to support digital creativity
Institute DIAG, Sapienza University of Rome
Advisor Prof. Massimo Mecella

Date (from - to) Aug 3, 2015 - Oct 31, 2015
Qualification Research Scholarship
Project Formal methods based on game theory
Institute University of Naples "Federico II", Italy
Supervisor Prof. Aniello Murano

External Activities

Date (from - to) September 2023 - present
Activity Research Member of Common Room, Kellogg College

Teaching Activities (Lecturer)

Course Game-Theoretic Approach to Planning and Synthesis
Date (from - to) 24-28 July 2023
Institute University of Ljubljana
Event European Summer School on Artificial Intelligence 2023

Course Game-Theoretic Approach to Planning and Synthesis
Date (from - to) 4-8 July 2022
Institute Sapienza University & ICT-48 TAILOR
Type PhD Course

Class Tutor

Course Foundations of Self-Programming Agents
Date (from - to) January 2023 - March 2023, Hilary Term
Institute Department of Computer Science, University of Oxford
Principal Instructor Prof. Giuseppe De Giacomo

Course Foundations of Self-Programming Agents
Date (from - to) January 2024 - March 2024, Hilary Term
Institute Department of Computer Science, University of Oxford
Principal Instructor Prof. Giuseppe De Giacomo

Teaching Assistant

Course Programming - Lab.
Date (from - to) September 2018 - December 2018
Institute University of Naples "Federico II", Italy
Principal Instructor Prof. Aniello Murano

Course Algorithms and data structures - Lab.
Date (from - to) March 2017 - October 2018
Institute University of Naples "Federico II", Italy
Principal Instructor Prof. Aniello Murano

Course Mathematics
Date (from - to) Novermber 2016 - February 2017
Institute University of Naples "Federico II", Italy
Principal Instructor Prof. Livia D'Apuzzo

Course Algorithms and data structures - Lab.
Date (from - to) March 2016 - February 2017
Institute University of Naples "Federico II", Italy
Principal Instructor Prof. Aniello Murano

Event Organization

Chair On the Effectiveness of Temporal Logics on Finite Traces in AI (AAAI Spring Symposium Series)
Organizing Committee member Italian Conference on Theoretical Computer Science (ICTCS), 2017, Italian Conference on Computational Logic (CILC), 2017

Community Services

Activities Program Committee Member: ECAI 2020, AAAI 2021, IJCAI Survery Track 2021, AAMAS 2021, AAMAS 2022, IJCAI Survery Track 2021, IJCAI Survery Track 2022, IJCAI 2022 Main Track, KR 2023, ECAI 2023

Subreviewer: MFCS 2017, ICTCS 2017, AAMAS 2018, IJCAI 2018

Journal Reviewer: Fundamenta Informaticae

Scientific Communications

Conference talks

Title LTLf Synthesis Under Environment Specifications (Invited Talk)
Date October, 2023
Event Brown University, Providence, USA

Title LTLf synthesis under environment specifications for reachability and safety properties
Date September 15, 2023
Event EUMAS 2023, Napoli, Italy

Title Explicit and Symbolic Approaches for Parity Games
Date November 29, 2022
Event SPIRIT 2022, Udine, Italy

Title Compositional Safety LTL Synthesis
Date October 17, 2022
Event VSTTE 2022, Trento, Italy

Title LTLf Synthesis Under Environment Specifications
Date September 7, 2022
Event ICTCS 2022, Rome, Italy

Title LTLf Synthesis Under Environment Specifications (Invited Talk)
Date August 31, 2022
Event VardiFest 2022, Haifa, Israel

Title Two-Stage Technique for LTLf Synthesis Under LTL Assumptions
Date September 15, 2020
Event Highlights 2021, Online

Title Two-Stage Technique for LTLf Synthesis Under LTL Assumptions
Date September 18, 2020
Event KR 2020, Online

Title Solving Parity Games: Explicit vs Symbolic
Date July 8, 2018

Event 6th International Workshop on Strategic Reasoning (SR 2018), Oxford, UK

Title Solving Parity Games Using An Automata-Based Algorithm

Date July 22, 2016

Event 21st International Conference on Implementation and Application of Automata (CIAA 2016), Seoul, South Korea

Title Solving parity games in scala

Date October 10, 2014

Event Formal Aspects of Component Software (FACS 2014), Bertinoro,Italy

Publications

[1] Antonio Di Stasio, Paolo Domenico Lambiase, Vadim Malvone, and Aniello Murano. Dynamic Escape Game (Demonstration). In *AAMAS 2018*, pages 1806–1808, 2018.

[2] Antonio Di Stasio, Aniello Murano, and Moshe Y. Vardi. Solving Parity Games: Explicit vs Symbolic. In *CIAA 2018*, pages 159–172, 2018.

[3] Giuseppe De Giacomo, Aniello Murano, Sasha Rubin, and Antonio Di Stasio. Imperfect-Information Games and Generalized Planning. In *IJCAI 2016*, pages 1037–1043, 2016.

[4] Antonio Di Stasio, Aniello Murano, Giuseppe Perelli, and Moshe Y. Vardi. Solving Parity Games Using an Automata-Based Algorithm. In *CIAA 2016*, pages 64–76, 2016.

[5] Antonio Di Stasio, Aniello Murano, Vincenzo Prignano, and Loredana Sorrentino. Solving Parity Games in Scala. In *FACS 2014*, pages 145–161, 2014.

[6] Giuseppe De Giacomo, Antonio Di Stasio, Francesco Fuggitti, and Antonio Di Stasio. Pure-past linear temporal and dynamic logic on finite traces. In *IJCAI 2020*, pages 4959–4965.

[7] Giuseppe De Giacomo, Antonio Di Stasio, Moshe Y. Vardi, and Shufang Zhu. Two-stage technique for ltlf synthesis under LTL assumptions. In *KR 2020*, pages 304–314, 2020.

[8] Giuseppe De Giacomo, Antonio Di Stasio, Giuseppe Perelli, and Shufang Zhu. Synthesis with mandatory stop actions. In *KR 2021*, pages 237–246, 2021.

[9] Giuseppe De Giacomo, Antonio Di Stasio, Lucas M. Tabajara, Moshe Y. Vardi, and Shufang Zhu. Finite-trace and generalized-reactivity specifications in temporal synthesis. In *IJCAI 2021*, pages 1852–1858, 2021.

[10] Antonio Di Stasio. LTLf synthesis under environment specifications. In *ICTCS 2022*, pages 40–46, 2022.

[11] Giuseppe De Giacomo, Suguman Bansal Antonio Di Stasio, Yong Li, Moshe Y. Vardi, and Shufang Zhu. Compositional Safety LTL Synthesis. In *VSTTE 2022*, pages 1–19, 2022.

[12] Antonio Di Stasio. Explicit and symbolic approaches for parity games (short paper). In *SPIRIT 2022*, 2022.

[13] Davide Catta., Antonio Di Stasio., Jean Leneutre., Vadim Malvone., and Aniello Murano. A game theoretic approach to attack graphs. In *ICAART 2023*, pages 347–354, 2023.

[14] Giuseppe De Giacomo, Antonio Di Stasio, Lucas M. Tabajara, Moshe Y. Vardi, and Shufang Zhu. Finite-trace and generalized-reactivity specifications in temporal synthesis. *Formal Methods in System Design (2023)*, 2023.

[15] Benjamin Aminof, Giuseppe De Giacomo, Antonio Di Stasio, Hugo Francon, Sasha Rubin, and Shufang Zhu. Ltlf synthesis under environment specifications for reachability and safety properties. In *EUMAS 2023*, 2023.

Languages

Mother tongue Italian

Foreign language English

References

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Reference Prof. Moshe Y. Vardi
Role University Professor
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