Antonio Di Stasio

Personal Information

Name & Surname Antonio Di Stasio

Research Interests

Topics Game Theory, Parity Games, Formal Aspects of System Specification, Veri-

fication, Synthesis, and Automated Planning.

Experiences

Date (from - to) July 1, 2020 - present

Qualification Post-doctoral researcher

Project WhiteMech

Institute "La Sapienza" University of Rome

Advisor Prof. Dr. Giuseppe De Giacomo

Date (from - to) June 1, 2019 - May 31, 2020

Qualification Post-doctoral researcher

Project Metodi e tecniche di supporto alla creatività digitale

Institute "La Sapienza" University of Rome

Advisor Prof. Dr. Massimo Mecella

Date (from - to) Aug 3, 2015 - Oct 31, 2015

Qualification Research Scholarship

 $\textbf{Project} \quad \text{Formal methods based on game theory}$

Institute University of Naples "Federico II", Italy

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

Education Degrees

Date (from - to) November 2015 - February 2019

Qualification Doctorate (Ph.D.)

Field 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

Date (from - to) 2006 - 2011

Degree Bachelor Degree in Computer Science (Class 26)

Institute University of Naples "Federico II", Italy

Obtained on March 23rd, 2011

Final mark 106/110

Thesis Studio, elaborazione ed implementazione di un algoritmo di ranking per

giochi di parità

Supervisor Prof. Aniello Murano

High school diploma

Date (from - to) 2001 - 2006

Degree Industrial Technical Institute Diploma

Institute Istituto Tecnico Industriale A.Righi VIII - Naples, Italy

Obtained on July 4th, 2006

Final mark 82/100

Technology Skills

 $\textbf{Languages:} \quad \mathsf{C}/\mathsf{C}{++}, \ \mathsf{Java}, \ \mathsf{OCaml}$

Markup Languages: XML, HTML, Latex

Operative Systems: Windows, Linux, Mac OS

Languages

Mother tongue Italian
Foreign language English

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

Scientific Communications

Conference talks

Title LTLf Synthesis Under Environment Specifications

Date September 7, 2022

Event ICTCS 2022, Rome

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

Event Organization

Committee member

Organizing ICTCS 2017, 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

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

Journal Reviewer: Fundamenta Informaticae

Teaching Activities

Course Game-Theoretic Approach to Planning and Synthesis (Phd Course)

Date (from - to) 4-8 July 2022

Institute Sapienza University of Rome

Teaching Assistant

Tutor for the course Programming - Lab.

Date (from - to) September 2018 - December 2018

Institute University of Naples "Federico II", Italy

Principal Instructor Prof. Aniello Murano

Tutor for the 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

Tutor for the course Mathematics

Date (from - to) Novermber 2016 - February 2017

Institute University of Naples "Federico II", Italy

Principal Instructor Prof. Livia D'Apuzzo

Tutor for the 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

References

Reference Prof. Aniello Murano

Institute University of Naples "Federico II", Italy

Email murano@na.infn.it

Reference Prof. Moshe Y. Vardi

Institute Rice University, Houston, TX, USA

Email vardi@cs.rice.edu

Reference Prof. Giuseppe De Giacomo

Institute University of Rome "La Sapienza", Italy

Email degiacomo@diag.uniroma1.it