# Luca Di Stefano

✉ luca.distefano@gssi.it 📞 … 🌐 lou1306.github.io 🔗 linkedin.com/in/lou1306

## WORK EXPERIENCE

**IMT LUCCA** Grant holder
Dec 2019 – May 2020 • Lucca, IT

Research project grant in "Verification of Emerging Properties in Collective Adaptive Systems".

**THALES ALENIA SPACE**
Workshop Planning Intern
Jun 2015 – Feb 2016 • L'Aquila, IT

Maintenance of legacy traceability systems; development of in-house client applications (SQL Server, VBA).

**AUBAY RESEARCH & TECHNOLOGIES** Intern
Dec 2013 – Feb 2014 • Carsoli, IT

Bachelor's thesis project. Design of a digital publishing platform with a cross-platform mobile client (C#, ASP.NET, Windows Communication Foundation, Java, Xamarin).

## VOLUNTEERING

**ASSOCIAZIONE ITALIANA GUIDE E SCOUTS D'EUROPA CATTOLICI**
January 2015 – Present time

Development and deployment of web applications (C#, ASP.Net, SQL Server, PHP, JavaScript, Azure).

## PROGRAMMING

**Proficient:**
Python • C# • F# • Java • LaTeX
**Competent:**
C • C++ • Javascript • T-SQL
Matlab • Bash • Erlang
**Familiar:**
OCaml • PHP • Prolog • VHDL

## CERTIFICATIONS

2015 Cisco CCNA Routing and Switching: Introduction to Networks
2010 Cambridge First Certificate in English (FCE). Pass with merit

## PUBLICATIONS (DBLP: **215/9758**, ORCID iD: **0000-0003-1922-3151**)

- Luca Di Stefano, Frédéric Lang, and Wendelin Serwe. Combining Sliver with CADP to analyze multi-agent systems. In COORDINATION, 2020 (to appear).

- Rocco De Nicola, Luca Di Stefano, and Omar Inverso. Multi-agent systems with virtual stigmergy. Sci. Comput. Program., 187, 2020.

- Rocco De Nicola, Luca Di Stefano, and Omar Inverso. Toward Formal Models and Languages for Verifiable Multi-Robot Systems. Front. Robot. AI, 5, 2018.

- Rocco De Nicola, Luca Di Stefano, and Omar Inverso. Multi-agent Systems with Virtual Stigmergy. In STAF 2018 - Collocated Workshops, Revised Selected Papers, 2018.

## EDUCATION

**INRIA** Visiting PhD student
Mar – Jul 2019 • Grenoble, FR
- Encoding of multi-agent systems in the LNT specification language
- Verification of multi-agent systems through model checking (**CADP**)

**1ST VMCAI WINTER SCHOOL** Attendee
Jan 2019 • Lisbon, PT
- Computing with SAT oracles
- Abstract interpretation
- Modeling and verification of distributed protocols

**GRAN SASSO SCIENCE INSTITUTE** PhD in Computer Science
Oct 2016 – Present time • L'Aquila, IT
- Languages and process algebras for the specification and verification of reactive systems
- Semantics of programming languages
- Model checking and software verification

Other activities: student representative in the academic senate (2018–2020)

**UNIVERSITY OF L'AQUILA**
MS in Computer Science and Systems Engineering, cum laude
Mar 2014 – Oct 2016 • L'Aquila, IT
- Control Theory
- Communication networks
- Spatial information theory
- Embedded systems

BS in Computer Science and Systems Engineering
Oct 2010 – Mar 2014 • L'Aquila, IT

## SOFTWARE PROJECTS

- SLiVER: a tool to verify multi-agent systems with stigmergic interaction by reduction to sequential imperative programs (Python, F#). Code partially available on **GitHub**.
- An open-source toolchain to synthesize garbled circuits from Python specifications (Python, Yosys, TinyGarble). Assignment for a Cryptography and Security course at GSSI. Code available on **GitHub**.
- A computer vision algorithm for goal-oriented obstacle avoidance (Python, OpenCV, V-REP). Master's thesis project; presented as a poster at COSIT2017. Code available on **GitHub**.