Stefano Demarchi

CONTACT DIBRIS - Viale Causa, 13 (+39) 01033 - 52150

INFORMATION 16145 Genova, IT stefano.demarchi@edu.unige.it

github.com/sdemarch

Employment Università degli Studi di Genova

AND EXPERIENCE PhD student 2019 - Present

Study and development of AI techniques for the formal verification of Neural Networks, part of the **NeVerTools** development team. Teaching support activities for an introductory course to Computer

Science and Python programming.

Università degli Studi di Sassari | Athena Sardegna

Research Engineer 2018 - 2019

Development of a backend framework for a commercial platform (PILOW), research and design of optimization algorithms

for logistics.

AI-Lift

 $R \mathcal{E} D$ collaborator 2017 - 2019

Part of the development team of **LiftCreate**, a tool for the design of elevator systems enabled by AI techniques.

EDUCATION Università degli Studi di Genova, Genova, IT

M.Sc. in Computer Engineering, October 2018

Product Configuration for Complex Systems: a case study in Computer-automated

Design of Elevators

108/110

B.Sc. in Electronics Engineering, March 2016

Realization of a parallel computing infrastructure based on Google Cloud Platform

88/110

Universitè de Technologie de Compiègne, Compiègne, FR

European Master in Complex Systems in Interaction, September 2018

Double-degree program in collaboration with Università degli Studi di Genova

Conservatorio di Musica Niccolò Paganini, Genova, IT

Percussion Instruments student since 2018

Languages Italian: Mothertongue

English: Fluent B1 (certificate) C1 estimated French: B1 (certificate) C1 estimated

PROGRAMMING
AND SOFTWARE

Programming:
Python, Java, C++, C, MATLAB, PHP
SPRING Java, VAADIN

Frameworks: SPRING Java, VAADIN
Markup: LATEX, HTML5, CSS
Environments: Microsoft Windows, Linux, Microsoft Office Suite,

Visual Studio, IntelliJ IDEA, PyCharm, mySQL, GitHub

PUBLICATIONS

- S. Demarchi, D. Guidotti, A. Pitto and A. Tacchella, Formal Verification of Neural Networks: a Case Study about Adaptive Cruise Control, in International Conference on Modelling and Simulation, ECMS 2022, Aalesund, Norway, May 30th-June 3rd, 2022. Proceedings, 2022.
- S. Demarchi, M. Menapace and A. Tacchella, *Automated Design of Elevator Systems: Experimenting with Constraint-Based Approaches*, in International Conference of the Italian Association for Artificial Intelligence, AIxIA 2021, Online, December 1st-3rd, 2021, Proceedings, 2021.
- S. Demarchi, M. Menapace and A. Tacchella, *Automating Elevator Design with Satisfiability Modulo Theories*, in IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2019, Portland, Oregon, November 4-6, 2019, Proceedings, 2019.
- S. Demarchi, Automated Design of Complex Systems with Constraint Programming Techniques, in Cyber-Physical Systems Summer School Workshop, CPSWS 2019, Alghero, Italy, September 23, 2019, Proceedings, 2019.