

Stefano Demarchi

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| CONTACT INFORMATION | DIBRIS - Viale Causa, 13 16145 Genova, IT | (+39) 01033 - 52150 stefano.demarchi@edu.unige.it github.com/sdemarch |
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| EMPLOYMENT AND EXPERIENCE | Università degli Studi di Genova <i>PhD student</i> 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. | 2019 - Present |
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| | Università degli Studi di Sassari Athena Sardegna <i>Research Engineer</i> Development of a backend framework for a commercial platform (PILOW), research and design of optimization algorithms for logistics. | 2018 - 2019 |
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| | AI-Lift <i>R&D collaborator</i> Part of the development team of LiftCreate , a tool for the design of elevator systems enabled by AI techniques. | 2017 - 2019 |
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| EDUCATION | Università degli Studi di Genova, Genova, IT M.Sc. in Computer Engineering, October 2018 <i>Product Configuration for Complex Systems: a case study in Computer-automated Design of Elevators</i> 108/110 B.Sc. in Electronics Engineering, March 2016 <i>Realization of a parallel computing infrastructure based on Google Cloud Platform</i> 88/110 |
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| | Université 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 A, mention |
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| | Conservatorio di Musica Niccolò Paganini, Genova, IT Percussion Instruments student since 2018 |
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| LANGUAGES | <table><tr><td>Italian:</td><td>Mothertongue</td><td></td><td></td></tr><tr><td>English:</td><td>Fluent</td><td>B1 (certificate)</td><td>C1 estimated</td></tr><tr><td>French:</td><td>Fluent</td><td>B1 (certificate)</td><td>C1 estimated</td></tr></table> | Italian: | Mothertongue | | | English: | Fluent | B1 (certificate) | C1 estimated | French: | Fluent | B1 (certificate) | C1 estimated |
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| English: | Fluent | B1 (certificate) | C1 estimated | | | | | | | | | | |
| French: | Fluent | B1 (certificate) | C1 estimated | | | | | | | | | | |

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| PROGRAMMING AND SOFTWARE | <table><tr><td>Programming:</td><td>Python, Java, C++, C, MATLAB, PHP</td></tr><tr><td>Frameworks:</td><td>SPRING Java, VAADIN</td></tr><tr><td>Markup:</td><td>L^AT_EX, HTML5, CSS</td></tr><tr><td>Environments:</td><td>Microsoft Windows, Linux, Microsoft Office Suite, Visual Studio, IntelliJ IDEA, PyCharm, mySQL, GitHub</td></tr></table> | Programming: | Python, Java, C++, C, MATLAB, PHP | Frameworks: | SPRING Java, VAADIN | Markup: | L ^A T _E X, HTML5, CSS | Environments: | Microsoft Windows, Linux, Microsoft Office Suite, Visual Studio, IntelliJ IDEA, PyCharm, mySQL, GitHub |
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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.

G. Cicala, S. Demarchi, M. Menapace, L. Annunziata and A. Tacchella, *A Comparison of Declarative AI Techniques for Computer Automated Design of Elevator Systems*, in Intelligenza Artificiale (TBA), 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.

HONORS AND AWARDS

Best Paper award at the ECMS 2022 Conference