Marco Parola

Ph.D. candidate

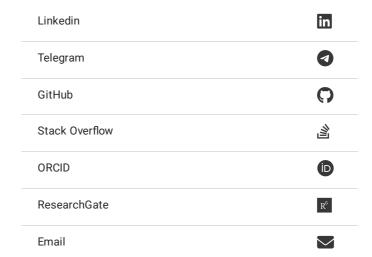
MLPI member



Last update: November 22, 2024

Up-to-date version of CV is available at

https://MarcoParola.github.io/cv



Ph.D. student enrolled in the Information Engineering course at the University of Pisa (Italy). Specialised in advanced deep learning architectures, computer vision and explainable artificial intelligence. I am enthusiastic about open source and open data principles, actively participate in the Stack Overflow community and contribute to GitHub projects. Full stack development skills on main deployment platforms developed during experiences in the enterprise environment.

Education

01/11/2022 - present

Pisa, Italy

Ph.D.

Ph.D. in Information Engineering enrolled in the XXXVIII cycle of the PhD in Information Engineering at University of Pisa. (in progress)

15/10/2019 - 18/02/2022

Pisa, Italy

Master degree

Master degree in Artificial Intelligence and Data Engineering at University of Pisa. Mark: 110/110

08/11/2015 - 14/10/2019

Pisa, Italy

Bachelor degree

Bachelor degree in Computer Engineering at University of Pisa. Mark: 97/110

Python	••••	DL	••••	OpenCV	••••	XAI	••••	ML	••••	JS	••••
C/C++	••••	C#	••••	Java	••••	Data	••••	Linux	••••	Git	••••
Backend	••••	Frontend	••••	Web	••••						

Professional Experience

01/11/2024 - present

Clermont-Ferrant, France

Visiting Ph.D.

Visiting Ph.D. student at <u>DREAM - Research on Embedded Architecture and Multisensor - research team</u> at <u>Insitut Pascal</u>, <u>Université</u> <u>Clermont Auvergne</u>.

Deep Learning Patient monitoring Medical Imaging Computer Vision Video analysis

01/01/2024 - 31/08/2024

Aalborg, Denmark

Visiting Ph.D.

Visiting Ph.D. student at Visual Analysis and Perception Laboratory (vap-lab) at Aalborg University.



01/05/2022 - 31/10/2022

Pisa, Italy

Research fellow

Research fellow on "Decision support systems with explainable models for diagnosis and prognosis based on medical images" funded by MUR-PRIN REASONIG 2020 project, supervisors Prof. Gigliola Vaglini and Prof. Mario GCA Cimino; at <u>University of Pisa</u>.

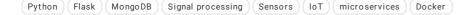


15/10/2021 - 30/04/2022

Q Lucca, Italy

Machine learning engineer

Machine learning engineer at Move Solutions - Move S.r.l.. Part time. I developed microservices to be integrated into the Move Solutions platform architecture to provide ML analysis on sensor signals.



01/09/2019 - 15/06/2021

♀ Livorno, Italy

Software developer

Software developer at <u>5Space</u> S.n.c.. I worked part-time on OptGear project, a web application to perform optimization calculations for mechanical gears, which finds the best combination of gear parameters.



30/07/2018 - 31/01/2019

Pisa, Italy

Software developer intern

Software developer at <u>Labortori Archa</u> S.r.l.. Internship. Implementation of LIMS (Laboratory Information Management System) using Microsoft technology stack.



Publications

Journal 2024

Parola, M., Galatolo, F., La Mantia, G., Cimino, M.G., Campisi, G., Di Fede, O., 2023. Image-based screening of oral cancer via deep ensemble architecture, in: 2023 IEEE Symposium Series on Computational Intelligence (SSCI), IEEE. pages 1572–1578. doi:10.13140/RG.2.2.24070.34880



Object Detection Medical Imaging Deep Leraning CBR Oral Cancer

Conf

2023

Parola, M., La Mantia, G., Galatolo, F., Cimino, M.G., Campisi, G., Di Fede, O., 2023. Image-based screening of oral cancer via deep ensemble architecture, in: 2023 IEEE Symposium Series on Computational Intelligence (SSCI), IEEE. pages 1572–1578. doi:10.13140/RG.2.2.24070.34880



Object Detection | Medical Imaging | Deep Leraning | Ensemble Learning | Oral Cancer

Conf

2023

Simionato, G.; Parola, M.; and Cimino, M.; (2023). Impressionist Hole Detection and Healing Using Swarms of Agents with Quantized Perception. In Proceedings of 2023 IEEE Symposium Series on Computational Intelligence. (2023). pages 1213–1220



Drone Swarm Intelligence Hole Detection

Book chap

2022

Parola, M.; Galatolo, F.; Torzoni, M. and Cimino, M. (2022). **Convolutional Neural Networks for Structural Damage Localization on Digital Twins**. In International Conference on Deep Learning Theory and Applications (pp. 78-97). Cham: Springer Nature Switzerland.



Stuctural Health Monitoring Deep Leraning Sensors Digital Twin

Conf

2022

Cimino, M.; Galatolo, F.; **Parola, M.**; Perilli, N. and Squeglia, N. (2022). **Deep Learning of Structural Changes in Historical Buildings: The Case Study of the Pisa Tower**. In Proceedings of the 14th International Joint Conference on Computational Intelligence (IJCCI 2022) - NCTA; ISBN 978-989-758-611-8; ISSN 2184-3236, SciTePress, pages 396-403. DOI: 10.5220/0011551800003332



Stuctural Health Monitoring Deep Leraning Sensors Tower of Pisa

Conf

2022

Parola, M.; Galatolo, F.; Torzoni, M.; Cimino, M. and Vaglini, G. (2022). Structural Damage Localization via Deep Learning and IoT Enabled Digital Twin. In Proceedings of the 3rd International Conference on Deep Learning Theory and Applications - DeLTA; ISBN 978-989-758-584-5; ISSN 2184-9277, SciTePress, pages 199-206. DOI: 10.5220/0011320600003277



Stuctural Health Monitoring Deep Leraning Sensors Digital Twin

Preprint

2021

Parola, M., Nannini, A., and Poleggi, S. (2021). Web image search engine based on LSH index and CNN Resnet50. arXiv preprint arXiv:2108.13301.



Information Retrieval Computer Vision Deep Leraning