# Marco Parola

#### Ph.D. candidate

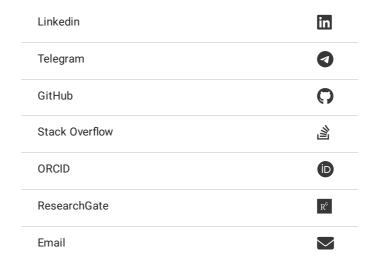
MLPI member



Last update: February 1, 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, Italy. (in progress)

15/10/2019 - 18/02/2022

## Master degree

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

08/11/2015 - 14/10/2019

## Bachelor degree

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



# **Professional Experience**

01/01/2024 - 31/08/2024

## Visiting Ph.D.

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



01/11/2022 - present

#### Ph.D. candidate

Ph.D. candidate enrolled in Information Engineering phd program at University of Pisa, Italy.



01/05/2022 - 31/10/2022

#### Research fellow

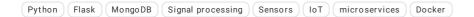
Research fellow on "Decision support systems with explainable models for diagnosis and prognosis based on medical images" funded by MUR-PRIN REASONIG 2020 project, supervisors Prof. Gigliola Vaglini and Prof. Mario GCA Cimino; at <u>University of Pisa</u>, Italy.



15/10/2021 - 30/04/2022

## Machine learning engineer

Machine learning engineer at <u>Move Solutions</u> - Move S.r.l., Lucca, Italy. 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

## Software developer

Software developer at <u>5Space</u> S.n.c., Livorno, Italy. 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

## Software developer intern

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



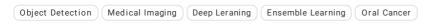
## **Publications**

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





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

Conf

2023

Parola, M.; Dirrhami, H.; Cimino, M. and Squeglia, N. (2023). Effects of Environmental Conditions on Historic Buildings: Interpretable Versus Accurate Exploratory Data Analysis. In Proceedings of the 12th International Conference on Data Science, Technology and Applications - DATA; ISBN 978-989-758-664-4; ISSN 2184-285X, SciTePress, pages 429-435. DOI: 10.5220/0012119700003541



 $\fbox{Regression } \fbox{Stuctural Health Monitoring } \fbox{Deep Leraning } \fbox{Sensors} \fbox{Tower of Pisa}$ 

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