

## PERSONAL INFORMATION

## Marco Puccini

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Gender Male | Date of birth 12 July 1979 | Nationality Italian

## WORK EXPERIENCE

Sep 2020 – Present

## Research Fellow

ENEA TERIN-ICT, Rome, Italy

Data Intensive architectures. ICT for Heritage Science.

Nov 2019 – Jun 2020

## ICT consultant

Sys-Man S.r.l. for ENEA DTE-ICT, Rome, Italy

ECODIGIT project: Proof of concept of middleware component for a digital ecosystem for cultural heritage. Containerized PoC development

Jan 2019 – Oct 2019

## ICT consultant

Evodevo S.r.l. for ENEA DTE-ICT, Rome, Italy

ECODIGIT project: Proof of concept of middleware component for a digital ecosystem for cultural heritage. MongoDB sharded cluster design and deployment

Sep 2016 – Jan 2017

## Independent contractor

University of Rome "La Sapienza", Department of Mechanical and Aerospace Engineering, Rome, Italy

Particle Image Velocimetry (PIV) data analysis for the dynamic of cavitation bubbles

Jan 2013 – Dec 2015

## Fellowship

CNR-INM Institute of Marine Engineering (ex CNR-INSEAN), Rome, Italy

RITMARE project: Evaluation and definition of EEDI (Energy Efficiency Design Index) for Ro-Ro cargo ships: form factor, scale effect, correlation between towing tank tests on scaled models with real ships, uncertainty analysis

Oct 2015 – Present

## Researcher / Independent Consultant

University of Rome "La Sapienza", Departments of Sciences and Medical and Surgical Biotechnologies and Department of Molecular Medicine

Data processing and analysis of recorded radio-isotopic irradiation on a LuYAP:Ce array of crystal pixels

Oct 2009 – Jul 2011

## Internship

TakeAir S.r.l., Viale delle Milizie 114 00192 Rome, Italy

- Air quality forecasting system, build-up of the geo-referenced emissions database
- Linux sysadmin assistant

## EDUCATION AND TRAINING

### 2012 Master degree in Physics

University of Rome "La Sapienza", Italy

Supervisors Prof. Franco Meddi and Eng. Marialuisa Mongelli

Title *Validation of numerical models using seismic monitoring remotely of structural elements for conservation of cultural heritage.*

Description This work aims to build up a survey methodology that integrates a fem model (finite element method) with seismic tests on shake table. The methodology employs measures of displacements of a scaled structure to improve the related fem model over a HPC infrastructure that allows to make remote the entire process

## PERSONAL SKILLS

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C2	B2	B2	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

## Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

[Digital competences - Self-assessment grid](#)

Computer skills

- OS: GNU/Linux, OSX, Microsoft Windows
- Web Dev: HTML, CSS, PHP, Apache HTTP, Nginx
- Microservices: Docker, Docker-compose, Kubernetes
- DB: mongoDB, sqlite, influxDB, Virtuoso
- Sys Admin: SSH, bash scripting
- Dev Ops: Git and Git platforms
- Data science: Python (Numpy, Pandas, Matplotlib, Seaborn, Jupyter notebook), Matlab/Octave
- other: L<sup>A</sup>T<sub>E</sub>X, Suite Office

Driving licence B

## PUBLICATIONS

- [1] Marialuisa Mongelli, Giulia Chellini, Silvio Migliori, Antonio Perozziello, Samuele Pierattini, Marco Puccini, and Alessandro Cosma. "Photogrammetry and structured light: comparison and integration of techniques in survey of the Corsini Throne at Corsini Gallery in Rome". In: *Proc. 2019 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage (Florence, Italy, December 4-6, 2019)*. IMEKO, 2019.
- [2] Raffaele Scaf , Rosanna Pellegrini, Marco Puccini, Maria N. Cinti, and Roberto Pani. "Rejection of events undergoing multiple interactions within a scintillation crystal array based on spatial charge spread discrimination for gamma-ray imaging". In: *Nuclear Inst. and Methods in Physics Research, A* 870 (Oct. 2017), pp. 97–102.

- [3] Raffaele Scaf , Rosanna Pellegrini, Maria N. Cinti, Marco Puccini, and Roberto Pani. "A Novel Scintillation Imager with Charge-spread Discrimination. Analytical Models Suitable for Crystal Arrays". In: *Nuclear Inst. and Methods in Physics Research, A* 833 (Oct. 2016), pp. 110–121.
- [4] F. Iannone M.Puccini M.Mongelli and S. Migliori. *Ecodigit: goals and activities report*. Tech. rep. ENEA, 2020.
- [5] S. Migliori M.Puccini F. Iannone and M. Mongelli. *Survey of the modern database technologies*. Tech. rep. ENEA, 2019.
- [6] A.Olivieri M.Puccini. *Measurement methodology of submersions with the new system pantographs*. Tech. rep. CNR-INSEAN, 2016.
- [7] A.Olivieri M.Puccini. *Indirect measurement of the deformation of the rails 1 INSEAN basin: real-time correction of the measurement of the dives for testing in free submer-sion conditions*. Tech. rep. CNR-INSEAN, 2016.