

## Curriculum vitae

## PERSONAL INFORMATION Marco Puccini

- marco.puccini@enea.it puccini.marco@gmail.com
- www.afs.enea.it/puccini kvarken.it
- github.com/mpuccini
- ★ gitlab.com/mpuccini
- D ORCID 0000-0003-1769-1592
- Skype marco.puccini79

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.I. 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.I. 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,

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 analisys of recorded radio-isotopic irradiation on a LuYAP:Ce array of crystal pixels

### Oct 2009 – Jul 2011

### Internship

TakeAir S.r.I., 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

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	
B2	C2	B2	B2	C1

English

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			

#### <u>Digital competences - Self-assessment grid</u>

## 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: LATEX, Suite Office

#### Driving licence

# **PUBLICATIONS**

- Raffaele Scafè, Marco Puccini, Rosanna Pellegrini, and Roberto Pani. "Pulse-Height and 2-D Charge-Spread Single-Pixels Studies on a LuYAP:Ce Scintillation Array". In: Instruments 5.3 (2021). URL: https://www.mdpi.com/2410-390X/5/3/26.
- [2] Marco Canciani, Mauro Saccone, Giovanna Spadafora, Silvio Migliori, Marialuisa Mongelli, Marco Puccini, Andrea Quintiliani, Andrea Gallia, and Catia. Masetti. "Modelli 3D e dati GIS: una loro integrazione per lo studio e la valorizzazione dei beni culturali." In: Archeomatica 11 (2020), pp. 18-23.



- [3] Luigi Asprino, Antonio Budano, Marco Canciani, Luisa Carbone, Miguel Ceriani, Ludovica Marinucci, Massimo Mecella, Federico Meschini, Marialuisa Mongelli, Andrea Giovanni Nuzzolese, Valentina Presutti, Marco Puccini, and Mauro Saccone. "EcoDigit-Ecosistema Digitale per la fruizione e la valorizzazione dei beni e delle attività culturali del Lazio". In: Atti del IX Convegno Annuale AIUCD. La svolta inevitabile: sfide e prospettive per l'Informatica Umanistica. Ed. by Cristina Marras, Marco Passarotti, Greta Franzini, and Eleonora Litta. Quaderni di Umanistica Digitale. Milano: Università Cattolica del Sacro Cuore, Jan. 2020. URL: http://amsacta.unibo.it/6316/.
- [4] 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.
- [5] Raffaele Scafé, 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.
- [6] Raffaele Scafé, 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.
- [7] F. Iannone M.Puccini M.Mongelli and S. Migliori. *Ecodigit: goals and activities report.* Tech. rep. ENEA, 2020.
- [8] S. Migliori M.Puccini F. Iannone and M. Mongelli. *Survey of the modern database technologies*. Tech. rep. ENEA, 2019.
- [9] A.Olivieri M.Puccini. *Measurement methodology of submersions with the new system pantographs*. Tech. rep. CNR-INSEAN, 2016.
- [10] 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 submersion conditions.* Tech. rep. CNR-INSEAN, 2016.