

PERSONAL INFORMATION

Marco Puccini

WORK EXPERIENCE

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: \LaTeX , 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 submersion conditions*. Tech. rep. CNR-INSEAN, 2016.