



# Europass Curriculum Vitae

## Personal information

Surname(s) / First name(s) **Marino Andrea**

**Desired employment / Occupational field** **Fire and Rescue Service, Civil Engineering, structural design under fire and explosion loads, fire safety engineering, component of Heavy USAR (Urban Search And Rescue) Italy Team ITA-01, STC (Short Terms Countermeasures)**

## Work experience

Dates 2008 – today

Occupation or position held Roles in Italian National Fire and Rescue Service (called C.N.VV.F.):

- Major (Fire Officer) from 15.09.2008 to 07.07.2015;
- Lieutenant Colonel (Fire Officer) from 08.07.2015 to 31.12.2022;
- Colonel (Fire Chief) from 01.01.2023;

### Workplaces:

- *Rome, Istituto Superiore Antincendi, Initial Training from 15.09.2008 to 01.11.2009;*
- *Officer in Varese's Province Fire Brigade from 02.11.2009 to 15.09.2013;*
- *Officer in Umbria's Region Fire Brigade from 16.09.2013 to 05.09.2020;*
- *Officer in Perugia's Province Fire Brigade from 06.09.2020 to 19.12.2023;*
- *Rome, Istituto Superiore Antincendi, Training for Fire Chief from 17.07.2023 to 18.11.2023;*
- *Fire Chief in Vercelli's Province Fire Brigade from 20.12.2023;*
- *Manager in Umbria's Region Fire Directorate from 30.09.2024;*
- *Deputy Fire Chief in Perugia's Province Fire Brigade from 01.02.2025.*

## Main activities and responsibilities

- Participant contact of Italian Fire and Rescue Service for the European Project "DEMONAX CYPRUS FSX (Call UCPM-2024-KAPP)";
- USAR Team Focal Point and Team Leader of forming Medium USAR team of Italy called "USAR Italy";
- Coordinator of working group in charge of elaborating a guideline concerning the safety in crowd management;
- Team Leader of Piemonte USAR-M Team, FSX, Samoens, France – 12.03.2024 – 14.03.2024;
- Design of fire simulator for training of firefighters and tutors of employees in charge for fire safety in workplaces, 2023;
- Member of a working group in charge for updating of Shoring Templates and Operating

Procedures for the support of buildings damaged by earthquakes, 2023;

- Member of a working group in charge for the design of USAR-M team organization to undergo an IEC according to INSARAG guidelines and procedures;
- STRATEGY project – member of CNVVF in CWA (CEN Workshop Agreement) 18022:2023 “*Exchanging of building and infrastructure damage information with Common Alerting Protocol*”;
- Coordination and structural assessment operations in Emilia-Romagna flood, 25.05.2023 – 29.05.2023;
- Coordination of rescue and structural assessment operations in Perugia earthquake, 09.03.2023 – 31.03.2023;
- Turkey Earthquake, Italy Heavy USAR Team ITA-01, leader of field rescue operations, 11.03.2023 – 18.02.2023;
- Coordination and structural assessment operations in Pesaro earthquake, 10.11.2022 – 14.11.2022;
- Attended the school “*Cross Fire – Advanced Structural Fire Engineering at intersections among disciplines*”, May 23-27, Como, Italy;
- Structural Engineer in USAR Italy ITA-1, which attained the INSARAG External Classification(IEC) on the 10<sup>th</sup> of November, 2018;
- Coordination, rescue, structural assessment and short countermeasures systems and Structural Triage (ordinary and cultural heritage buildings) in Center of Italy (Umbria) earthquake, 2016-2017;
- Deputy Commander of fire brigade in Norcia, 17.03. 2017 – 22.03.2017 and 05.05.2017 – 12.05.2017;
- Structural assessment operations and short countermeasures systems in Emilia-Romagna earthquake, 2012;
- Structural assessment operations and short countermeasures systems in Abruzzo earthquake, 2009;
- Trainer in USAR, Short Term Countermeasures Systems, Fire Prevention, Fire Resistance, Rescue coordination, etc.;
- Training in USAR, Short Term Countermeasures Systems, Fire Prevention, Fire Resistance, Rescue coordination, etc.;
- Training “*The Union Civil Protection Module Basic Course (MBC)*” – Streaming, 01.09.2021 e dal 06.09.2021 al 10.09.2021;
- Lecturer in many professional refresher course in fire prevention for technical freelancers regarding Structural Fire Resistance, ATEX, FSE, Italian Fire Prevention Code, etc... in Perugia, Terni, Varese, Milano, Brescia, Roma;
- Component of examining commission for national public competition to recruit 20 engineers and/or architects as officer in C.N.VV.F.
- Deputy Component of Umbria Regional Technical Committee for Fire Prevention and Major Accident Risks (2014 – today)
- President of examining commission for many tender procedures to entrust cleaning and food services in regional work places of C.N.VV.F
- Construction manager for heating system (second and last step) of Foligno Fire Brigade – amount of works € 62.812,60 – 2023;
- Construction manager for renovations of Foligno Fire Brigade – amount of works € 146.983,68 – 2023;
- Construction manager for energy efficiency of Perugia Fire Brigade – amount of works € 738.427,81– 2021-2024;
- Construction manager for solar thermal system of Perugia Fire Brigade – amount of works € 44.731,01 – 2021-2022;
- Construction manager for heating system of Gaifana Fire Brigade – amount of works € 59.637,24 – 2021-2022;
- Construction manager for heating system (first step) of Foligno Fire Brigade – amount of works € 72.445,86 – 2021-2022;
- Construction manager for electric system of Umbria Fire Brigade – amount of works € 36.700,13 – 2016;
- Construction manager for heating system of Assisi Fire Brigade – amount of works € 36.847,19 – 2016;
- Designer and Construction manager for renovations of MXP FATO helicopters Fire Brigade – amount of works € 145.994,33 – 2015;
- Assignment for validation of restructuring and adaptation design of Monza fire brigade site, 2015;

- Energy Manager of Umbria fire brigade sites, 2015 – 2023;
- Designer for energy requalification of Perugia (2), Foligno and Gaifana fire brigade buildings, obtaining the following national financing:
  - Perugia (2015): € 1.367.909,48
  - Perugia (2016): € 68.311,73
  - Foligno (2016): € 136.237,26
  - Gaifana (2016): € 110.774,97
- Responsible for the prevention and protection service in Fire and Rescue Service of Varese (2009 – 2013), Helicopter Department in MXP Airport (2009-2013 and 2016-2017) and Umbria Regional Directorate (2016-2020 and 2022-2023);
- FSE (Fire Safety Engineering);
- fire prevention;
- judicial police;
- consultant in some civil and penal proceedings;
- Plan of emergency services;
- responsible about regional teams, vehicles and facilities, and crater command, about logistic and instrumental means;
- examination of exception fire prevention cases;
- attendance in regional technical committee of fire prevention and major accident hazards involving dangerous substances (authority having jurisdiction in It);
- Author/Contributor in the scientific publications listed at the end of CV.

Name and address of employer Ministry of Interior  
 Type of business or sector Public Rescue, Fire Prevention, Fire Engineering, Control of Major Accident Hazard involving dangerous substances in establishment, USAR, STC

## Work experience

Dates 2001– 2008  
 Occupation or position held Designer and site engineer with Avellino town hall – Freelancer at the same time  
 Main activities and responsibilities Design of structures, electrical, hydraulic, heating systems, roads, Architectural designing etc.  
 Name and address of employer Major of Avellino, Italy  
 Type of business or sector Civil Engineering

## Education and training

Dates 2024  
 Title of qualification awarded Second Level Master Degree  
 Principal subjects/occupational skills covered Innovation in crisis management, public rescue and safety  
 Name and type of organisation providing education and training University of Tuscia, Viterbo, Italy  
 Level in national or international classification ISCED 7  
 Dates 2002-2006  
 Title of qualification awarded PhD  
 Principal subjects/occupational skills covered Thesis Title: “*Energetic Methods for Shape Optimization*”, structural research which contributes to the wider question of structural optimization in the field of civil engineering. It treats of finding the best shape of a structure by means of two methods with different peculiarities: R–adaptive finite element methods and Evolution strategies.  
 Name and type of organisation providing education and training University of Salerno, Fisciano, Italy  
 Level in national or international classification ISCED 6

Dates	1995-2001
Title of qualification awarded	Bachelor of Civil Engineer – course of studies about structures
Principal subjects/occupational skills covered	Thesis Title: “ <i>Sulla statica delle volte in muratura</i> ” (about statics of masonry vaults), structural research which treats of finding the trust surface in a generic 3D convex masonry vault by means of the application of the L.S.M. (Lumped Stress Method), implemented by researchers of Salerno University.
Name and type of organisation providing education and training	University of Salerno, Fisciano, Italy
Level in national or international classification	ISCED 5

### Personal skills and competences

Mother tongue(s) **Italian**

Other language(s) **English, as certified by “FCE (First Certificate in English)” released by University of Cambridge – ESOL Examinations (Council of Europe Level B2)**

Self-assessment <i>European level (*)</i>	<b>Understanding</b>		<b>Speaking</b>		<b>Writing</b>	
	Listening	Reading	Spoken interaction	Spoken production		
<b>English</b>	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences

- *Team work*: I usually work in various types of teams, and during design processes, and during research activities, and when I play football. I love working in team, because of the various cultural interactions and interchanges.
- *Concentration and constancy*: I think of holding an high skill of concentration during my work and studies and constancy in doing all my activities.
- *Overrunning of problem*: when I have a problem, I try to overrun all the possible difficulties, often with success.

Organisational skills and competences

I think of holding good organizational skills and competences, since I have the accountability of rescuer and firefighters inside and outside my usual base. I try to involve each member of a team keeping in mind personal skills and ideas, building an environment full of mutual respect, assuming a clear way of working, etc.

Technical skills and competences

Competent with structural engineering, fire prevention, fire design of structures, FSE (Fire Safety Engineering), STC, USAR

Computer skills and competences

Competent with:

- Microsoft Windows 7, Vista, XP, 2000, etc.
- Software self produced by means of TurboPascal, Visual Basic (even under Autocad, Word and Excel) and FortRan
- Microsoft Office programmes
- CAD programmes (Autocad, Archicad, Archline, Rhinocerus, CATIA, Edificius [BIM] etc.)
- Structural programmes (Mathematica, Matlab, SAP, MacSap, Nolian, West, IperSpace, Straus, Ansys, LS-Dyna, Hypermesh, Edilus, SAFIR, etc.)
- Road, electrical, thermal, computing etc programmes for civil design
- Working experience in BIM
- Software apps developing in Fortran, Visual Basic, Turbo Pascal, Visual Basic for Autocad and Excel; the main ones are listed below:
  - o Structural calculations by means of FEM of 2D frames
  - o Iterative Method to partition seismic actions in 3D frames
  - o L.S.M. Vaults: Lumped Stress Method to check masonry vaults
  - o Energetic method to search for best structural shape or best tetrahedron mesh
  - o Management of criminal proceedings regarding fire prevention safety in workplaces

Driving licence I hold a driving licence for categories of vehicles A3 (any engine displacement motorcycles) and B (any engine displacement cars).

### Additional information

References available upon request

### Technical and scientific publications

*"On the Structural Shape Optimization through Variational Methods and Evolutionary Algorithms"*, Mechanics of Advanced Materials and Structures, 18:225–243, 2011;

A. Marino, G. Rocchetta, *"Esercizi di Scienza delle Costruzioni"*, C.U.A. Cooperativa Universitaria Athena, 2017;

*"Analisi strutturali di un capannone in acciaio in condizioni di incendio"*, Costruzioni Metalliche, CTA e UNICMI, set/ott 2018

*"La valutazione della resistenza al fuoco delle strutture con metodi analitici"*, Il Giornale dell'Ingegnere n. 1/2019, Consiglio Nazionale degli Ingegneri, Ed. Quine

*"La Resistenza al Fuoco degli elementi strutturali"* - Focus sulla misura S.2 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2019;

*"La protezione attiva antincendio"* – Focus sulle misure S.6, S.7 e S.8 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2019

*"Metodi per l'ingegneria della sicurezza antincendio"* - Focus sui metodi M.1, M.2 e M.3 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2019;

*"Revisione critica di calcoli avanzati di resistenza al fuoco"* – magazine Antincendio, uscita dic 2019;

*"SOLUZIONE ALTERNATIVA DI RESISTENZA AL FUOCO PER UNA STRUTTURA CON ELEMENTI IN ACCIAIO DI CLASSE 4"*, portale web ingenio-web.it, aprile 2020;

Articolo *"Resistenza al fuoco delle strutture: corretta applicazione delle curve naturali di incendio e importanza della misura S.5 GSA"*, rivista Antincendio EPC, luglio 2020;

*"La progettazione della misura esodo"* – Focus sulla misura S.4 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2020;

*"Gestione della sicurezza e operatività antincendio"* – Focus sulle misure S.5 e S.9 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2020;

*"La progettazione della misura esodo"* – Focus sulla misura S.4 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2020;

*"Rischio Incendio ed esplosione in edilizia"* – INAIL e CNVVF, 2020;

*"Compartimentazione antincendio"* – Focus sulla misura S.3 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2021;

*"Reazione al fuoco"* – Focus sulla misura S.1 del Codice di Prevenzione Incendi – INAIL e CNVVF, 2021;

*"IL CODICE DEI CONTRATTI PUBBLICI E LA PROGETTAZIONE DELLE PRESTAZIONI DI RESISTENZA AL FUOCO DELLE STRUTTURE DI ACCIAIO"*, Commissione Fuoco, 2021;

*"IMPIEGO DI UN IMPIANTO A DISPONIBILITÀ SUPERIORE NEL PROGETTO DELLE PRESTAZIONI DI RESISTENZA AL FUOCO DI STRUTTURE DI ACCIAIO"*, Commissione Fuoco, 2021;

*"AGGIORNAMENTI NORMATIVI CODICE DI PREVENZIONE INCENDI DAL 01.01.2020 AL 31.12.2021"*, Commissione Fuoco, 2021;

*"Soluzione "alternativa" ai protettivi per una copertura in acciaio"*, magazine Antincendio, april 2022;

*"S.3 Compartimentazione: valutazione dell'irraggiamento termico verso un bersaglio esterno all'edificio sorgente. Confronto fra soluzioni conformi e soluzione alternativa"*, rivista Antincendio, aprile 2022;

*"Considerazioni sulla progettazione della resistenza al fuoco dei MAV in soluzione alternativa"*, magazine Antincendio, january 2023;

*"Soluzione alternative in un'attività commercial ai sensi del D.M. 3 settembre 2021"*, magazine

Antincendio, february 2023;

*“Prevenzione incendi per autorimesse”* – La Regola Tecnica Verticale V.6 del Codice di prevenzione incendi– INAIL e CNVVF, 2023;

*“Prevenzione incendi per attività ricettive turistico-alberghiere”* – La Regola Tecnica Verticale V.5 del Codice di prevenzione incendi– INAIL e CNVVF, 2023;

*“CWA 18022 – Exchanging of building and infrastructure damage information with Common Alerting Protocol”*, CEN-CENELEC Management Centre, August 2023;

*“Strutture resistenti al fuoco – Metodi di calcolo, tecnologie e procedure per una concreta sicurezza strutturale all'incendio”*, EPC Editore, 2023;

A. Marino, G. Rocchetta, *“Linee e superfici di influenza: teoria e applicazioni”*, KDP, Amazon, 2024;

*“Prevenzione Incendi per attività commerciali”* – La Regola Tecnica Verticale V.8 del Codice di prevenzione incendi– INAIL e CNVVF, 2024;

*“Prevenzione Incendi per attività scolastiche”* – La Regola Tecnica Verticale V.7 del Codice di prevenzione incendi– INAIL e CNVVF, 2024;

*“Prevenzione Incendi per attività asili nido”* – La Regola Tecnica Verticale V.9 del Codice di prevenzione incendi– INAIL e CNVVF, 2024.

I allow to handle my particulars under the national law (in Italy the law n. 196/2003 and GDPR) e its changes and supplements.  
Vercelli (ITA), February, 2025