

PERSON

## WORK EXPERIENCE

- Dec 2017–Present **Professional Fire Chief**  
Corpo Nazionale dei Vigili del Fuoco (Nat'l Fire and Rescue Service), Roma (Italy)  
**Business or sector** Public services
- Jan 2018–Jun 2018 **Guest researcher (mission)**  
NIST, Engineering Laboratory, Fire research division, Engineered Fire Safety Group, Gaithersburg, MD (United States)  
Processing of complex geometries for Fire Dynamics Simulator (FDS, <https://pages.nist.gov/fds-smv/>)  
**Business or sector** Research
- Jan 2014–Present **Member of the national Working group for the Italian Fire Code**  
Corpo Nazionale dei Vigili del Fuoco (Nat'l Fire and Rescue Service), Roma (Italy)  
  - Designing means of escape (S.4 chapter)
  - Performance-based approach to fire safety, CFD simulation (M.1, M.2, M.3 chapters)
  - Training of fire officers and professionals**Business or sector** Developing standards and norms
- Oct 2016–2017 **Technical advisor on fire and life safety modeling**  
Senato della Repubblica (Italian Senate), Commissione d'inchiesta sul disastro del traghetto Moby Prince, Roma
- Jul 2011–Aug 2017 **Professional Deputy Fire Chief**  
Corpo Nazionale dei Vigili del Fuoco (Nat'l Fire and Rescue Service), Genova Fire Brigade, Genova (Italy)  
  - Deputy rescue technical director (DTS, direttore tecnico dei soccorsi)
  - Fire safety engineering expert: computational fluid dynamics simulation of fires in industrial and civil buildings, peer review of FSE projects.
  - NBCR/CBRN level 3, incident commander.
  - Industrial risk analysis expert, Seveso Directive plants.**Business or sector** Public services
- Dec 2011–2015 **Adjunct Professor**  
Università degli Studi di Genova (Italy)  
Lectures on CFD analysis of enclosure fires

**Business or sector** Education

Dec 2002–Jul 2011

**Professional Fire Officer**

Corpo Nazionale dei Vigili del Fuoco (Nat'l Fire and Rescue Service), Genova Fire Brigade, Genova (Italy)

- Civil protection and emergency chief operation manager.
- Fire safety engineering expert: computational fluid dynamics simulation of fires in industrial and civil buildings, peer review of FSE projects.
- NBCR/CBRN level 3, incident commander.
- Industrial risk analysis expert, Seveso III Directive plants.
- Flood search and rescue expert: member of the SA national commission.
- Humanitarian mission management expert (health care, water and sanitation, GPS and geographic data management).

**Business or sector** Public services

Oct 2000–Dec 2002

**Chief Operating Officer (COO)**

Agenzia per il risparmio energetico (European SAVE Agency), Ancona (Italy)

Energy management consulting; planning, direction, organization of the agency; project management.

**Business or sector** Energy management

Oct 1999–Jul 2000

**Project Manager**

INESTENE, Paris (France)

Energy management in health care facilities; research activity coordinations; relations with international research partners.

**Business or sector** Research

1998–1999

**HEMS Flight Assistant (volunteer service)**

Helicopter Emergency Medical System (HEMS) of Marche Region, Ancona (Italy)

Flight assistance, radio communications, logistic assistance to medical team, basic life support.

**Business or sector** Medical emergency system

**EDUCATION AND TRAINING**

2010–Present

**EU Civil Protection Mechanism training**

- OPM Operational management (Dublin, Ireland, 2017)
- MODEX.EU exercise (Tritolwerk, Austria, 2016)
- Exchange of experts (Southampton, UK, 2014)
- DRHOUSE exercise (Patra, Greece, 2012)
- MODEX.EU exercise (Weeze, Germany, 2010)
- IMC Information management (Madrid, Spain, 2010).
- TEC 8.1 Technical expert (Revinge, Sweden, 2010).
- Also attended CMI (Roma, Italy, 2010), and HLC (Pisa, Italy, 2010) courses as management staff.

Sep 2017–Dec 2017

**Professional Fire Chief Course (Colonel rank)**

Istituto Superiore Antincendi (ISA), Roma (Italy)

2002–2003

**Professional Fire Officer Course (Major rank)**

Istituto Superiore Antincendi (ISA), Roma (Italy)

Crisis management, civil protection command and control system, fire safety, incident command, CBRN, USAR, industrial plant safety.

Sep 2001–Sep 2001 **Logisticien de mission humanitaire (Logistician)**

Médecins du Monde, ONG, Paris (France)

1997–2000 **PhD in Engineering Physics (EP)**

Università degli Studi di Ancona, Facoltà di Ingegneria, Ancona (Italy)

Energy management in civil buildings, health care facilities management.

1998–1999 **Master in Health Care Facilities Management**

Università degli Studi di Bologna, Bologna (Italy)

1995–1996 **Economic Sciences (Erasmus Program, student exchange)**

Université Montpellier I, Faculté de Sciences Économiques, Montpellier (France)

Management control, organizational analysis, economic sciences.

1991–1996 **Degree in Mechanical Engineering**

Università degli Studi di Ancona, Facoltà di Ingegneria, Ancona (Italy)

Energy and industrial plant management, renewable energies.

#### PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
French	C1	C2	C1	C1	C2
Spanish	C1	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

Communication skills Good ability to adapt to multicultural environments, gained through missions and work abroad.

Organisational / managerial skills Good experience in team management during emergency situation, gained through specific training, exercises, and participation to the following missions:

- 2016/17 - Central Italy earthquake, STC mission (Short term countermeasures).
- 2015 - Kathmandu (Nepal) earthquake, STC mission (Short term countermeasures).
- 2012 - Emilia Romagna (Italy) earthquake, STC mission (Short term countermeasures).
- 2009 - L'Aquila (Italy) earthquake, USAR mission.
- 2007 - Tanguieta (Benin, Africa) health care and technical mission, support to health care facilities.
- 1998 - Tamil Nadu (India), cooperation to self-development, micro-credit project.
- 1997 - Marche-Umbria (Italy) earthquake, medical mission.
- 1996 - Bosnia, post-war relief mission. 1994 - Tanzania, cooperation to self-development training.

- Job-related skills**
- GPS and geographical information management.
  - Radio communication.
  - Good ability in logistics and facilities management, gained through training and direct field experience.

**Digital skills**

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

Digital skills - Self-assessment grid

- Python and Fortran 2008 programming experience;
  - FDS Smokeview (CFD fire simulation); ALOHA (chemical dispersion)
  - OS: Linux (Debian, Fedora, Ubuntu), MS Windows;
  - Office applications, Web Content Management Systems;
- Other skills**
- Sports: water-polo, trekking, speleology.
  - Hobbies: radio-amateur.

**ADDITIONAL INFORMATION**

**Publications**

- E Gissi, E Ronchi, D Purser, "Transparency vs magic numbers: The development of stair design requirements in the Italian Fire Safety Code", *Fire Safety Journal*, <https://doi.org/10.1016/j.firesaf.2017.03.037>, Volume 91, July 2017
- E Gissi, "Soluzioni progettuali alternative per l'esodo, procedure analitiche di base e flessibilità progettuale", *Valutazione e Gestione del Rischio negli Insedimenti Civili ed Industriali 2016 Conference*, Pisa (Italy), September 2016
- AAVV, "L'utilizzo di strumenti innovativi da parte del CNVVF in occasione del terremoto del Nepal 2015 per la rapida stima dei danni e il supporto alle decisioni", *Valutazione e Gestione del Rischio negli Insedimenti Civili ed Industriali 2016 Conference*, Pisa (Italy), September 2016
- AAVV, "Deployment of ground and aerial robots in earthquake-struck Amatrice in Italy", *International Symposium on Safety, Security and Rescue Robotics (SSRR 16)*, Lausanne (CH), October 2016
- E Gissi, "Calcolo dei parametri per il dimensionamento dei sistemi d'esodo secondo soluzione conforme del Codice di prevenzione incendi" in "Codice di prevenzione incendi commentato", EPC editore, Roma, September 2015.
- E Gissi, R Lala, "Necessità e genesi del nuovo esodo del Codice di Prevenzione Incendi", *Rivista Antincendio*, EPC Periodici, Roma, September 2015.
- E Gissi, "Keynote presentation: the state of fire safety engineering in Italy", *SFPE Europe Conference on Fire Safety Engineering*, Copenhagen, June 2015.
- E Gissi, F Notaro, G Longobardo, F Valpreda, "Development and testing of BlenderFDS, the open, community-based, user interface for NIST FDS", *International congress Fire and computer modeling*, Santander, Spain, October 2012.
- E Gissi, F Notaro, G Longobardo, F Valpreda, "Development and testing of BlenderFDS, the open, community-based, user interface for NIST FDS", *VGR VII 2012*, Pisa, October 2012.
- E Gissi, "Persone disperse: la risposta efficace dei Vigili del fuoco di Genova", *Rivista Antincendio*, EPC Periodici, Roma, November 2011.
- E Gissi, N De Santis, F Valpreda, N Campo, "BlenderFDS, preprocessore open source e multiplatforma per il NIST Fire dynamics simulator: genesi e prospettive", *Atti convegno scientifico nazionale "Sicurezza nei sistemi complessi"*, Politecnico di Bari, October 2011.
- E Gissi, R Orvieto, C Brigante, "Applicazione della fire safety engineering alla progettazione antincendio del padiglione B della Fiera di Genova: una metodologia innovativa per la definizione

*quantitativa dello scenario di incendio", Atti convegno scientifico nazionale "Sicurezza nei sistemi complessi", Politecnico di Bari, October 2011.*

- E Gissi, F Filippone, A Russo, F Parodi, I Tortarolo, R Sabbatini, A Furgani, "*Intervento NBCR al Porto di Genova: la risposta operativa all'emergenza e la collaborazione interagenzia*", Atti convegno scientifico nazionale "*Sicurezza nei sistemi complessi*", Politecnico di Bari, October 2011.
- E Gissi, "*La nuova prevenzione incendi, l'evoluzione del CPI*", Atti summer school AIREPSA, Salsomaggiore, October 2011.
- E Gissi, "*Il rischio incendio nei cantieri navali*", Rivista Antincendio, EPC Periodici, Roma, August 2011.
- E Gissi, N De Santis, F Valpreda, "*Blender for fire safety*", Blender Conference 2009, Amsterdam, Olanda, October 2009.
- AAVV, Booklet "*The earthquake in Abruzzo and the Firefighters' work*", Roma, 2009.
- E Gissi, "*An introduction to fire simulation with FDS and Smokeview*", self-published, Genova, 2009.
- Ferraro L, Picasso G, Brizio F, Gissi E, "*L'esperienza genovese di nuova interazione sul campo 118-115*", N&A mensile italiano del soccorso, Pagina editrice, July 2009.
- E Gissi, "*La fire safety engineering nella progettazione delle vie d'esodo*", Rivista Antincendio, EPC Periodici, Roma, August 2008.
- E Gissi, "*Metodologia per un soccorso di qualità*", Obiettivo Sicurezza, Roma, May 2007.
- E Gissi, "*Offshore 2004*", Obiettivo Sicurezza, Roma, October 2004.
- G Caruso, E Gissi, "*Analisi teorico-sperimentale di un sistema integrato lago solare dissalatore*", 52° Congresso Nazionale ATI, Cernobbio (CO), September 1997.

#### Memberships

- IAFFS The International Association for Fire Safety Science, member
- Registered as Chartered Engineer at the *Ordine provinciale degli Ingegneri di Genova, Italy*

