

CURRICULUM VITAE



PERSONAL INFORMATION

Name **GENNARO AFELTRA**
Address **SCANDICCI, VIA U. FOSCOLO 9 - 50018**
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E-mail **afeltra.g@alice.it**
Nationality **Italian**
Date of birth **November 9th, 1954**
Civil status **Married since September 1st 1984 with Maria Pia SPINELLI, based in Florence**

WORK EXPERIENCE

- Date (from – to) **April 2011 – December 2014**
- Name and address of employer **Istituto Geografico Militare (IGM),
C. Battisti, 10/12 – 50122 Florence – Italy**
- Occupation or position held **Military Geographer (Colonel), Chief Division Production .**
- Main activities and Responsibilities **Coordination and control about all technical activity of geographic data production, including international projects and support to soldiers in missions out of national territory. The position was the highest technical authority in Italian army. Specific responsibility:**
 - Update Geodetic network, including leveling and GPS;
 - Update administrative state boundary
 - Maps production at medium scale (from 1:25.000 to 1:1000 000 scale)
 - Realization of database, with different resolution, for toponomics and Digital Terrain Model (DTM)
 - Agreement with Region to produce topographic database high resolution (1:5000 scale) using national standardization finalized to generalization to 1:25.000 scale;
 - Agreement with other National Agency to cover Italian territory by photo image, medium and high resolution, for agriculture interest;
 - Check and quality validation for DTM, obtained using LIDAR or SAR ,for national use
 - National or International Military project (MGCP – Multinational Geospatial Coo-production Project; ERM – European Regional Map)
 - Standardization for topographic database production on Italian territory
 - Agreement with Region to verify data quality about leveling and GPS points to update network

- Date (from – to) August 2008 – April 2011
- Name and address of employer Istituto Geografico Militare (IGM),
C. Battisti, 10/12 – 50122 Florence – Italy
- Occupation or position held Military Geographer - Chief of maps, geo-database, photogrammetric production data.
- Type of business or sector National Mapping Agency and Geographic Military Institute
- Main activities and Responsibilities
 - Production of national database at different resolution
 - Acquisition data using aero-photogrammetric method for maps production
 - Activity and study for automatic generalization using data at large scale to obtain new database at medium resolution and relative maps production
 - Update symbolization to print new maps at different scale
 - Support army for activity on national territory producing specific database
 - Standardization for coding topographic feature to use in national database
 - Check and verify about final quality to realize geo-data and cartography for Regional production defined by national agreement.

- Date (from – to) September 2003 - August 2008
- Name and address of employer Istituto Geografico Militare (IGM),
C. Battisti, 10/12 – 50122 Florence – Italy
- Occupation or position held Military Geographer - Chief of research and development.
- Type of business or sector National Mapping Agency and Geographic Military Institute
- Main activities and Responsibilities
 - Activity for standardization of geo-data production in national territory
 - Verify quality procedure of internal data production in IGM
 - Following technical activity of firm that produce data for IGM finalized for national use
 - Study and resource to define new geo-products for civilian or military national use
 - Verify line production in IGM and valuate, by monitoring, cost and time about all activity

- Date (from – to) February 2002 - August 2003
- Name and address of employer Istituto Geografico Militare (IGM),
C. Battisti, 10/12 – 50122 Florence – Italy
- Occupation or position held Military Geographer - Chief of Cartography service production.
- Type of business or sector National Mapping Agency and Geographic Military Institute
- Main activities and Responsibilities
 - Production data for EBM project
 - Production maps at the scale at the 1:25.000 and 1:50.000 scale
 - Production special maps at large scale, in different resolution, for national city of particular interest
 - Study how to draw on the maps the feature *rocks* in the best way, according with the quality tradition.

• Date (from – to)	August 1986 - February 2002
• Name and address of employer	Istituto Geografico Militare (IGM), C. Battisti, 10/12 – 50122 Florence – Italy
• Occupation or position held	Military Geographer - Chief of Center Elaboration Data and responsible for informatics application in the geo-data production field .
• Type of business or sector	National Mapping Agency and Geographic Military Institute
• Main activities and Responsibilities	<ul style="list-style-type: none"> - Production of first national DTM by Interpolation, with an internal software, using contour lines coming from analogic maps - Study for production of new maps in vector format and in a topological structure - First toponomics national database coming maps at the scale 1:25.000 - Production of maps in raster format by scanning analogic support from the internal archive of IGM - Production of automatic shaded relief, for maps production, using DTM to reproduce maps - Production of the first rectified photo image, in digital form, using DTM and aero-photo - Production of the first administrative boundary for all national territory at medium scale.

EDUCATION AND TRAINING

• Dates	July 1980 –
• Name and type of organisation providing education and training	University of Naples
• Principal subjects/occupational skills covered	Study about damage to virus T4 using protons
• Qualification / Diploma awarded	Degree in Physics, with final valuation 110/110 and laude
• Dates	July 1997
• Name and type of organisation providing education and training	Virginia – USA Military Defense
• Principal subjects/occupational skills covered	GIS course for updating
• Qualification / Diploma awarded	Remotely Sensed Imagery and GIS
• Dates	January 1986

• Name and type of organisation providing education and training

Florence – IGM Military Defense School

• Principal subjects/occupational skills covered

Geography course for updating

• Qualification / Diploma awarded

Specialization in Geodesy and Topography

• Dates

January 1985

• Name and type of organisation providing education and training

Rome – Italian Military Defense School

• Principal subjects/occupational skills covered

Informatics course for updating

• Qualification / Diploma awarded

Project Information Sistem

PERSONAL SKILLS AND COMPETENCES

From 1984 he has working in IGM, involved in the most important project finalized to produce geo-database or topographic maps. He followed for years the works of the DGIWG (Digital Geographic Information Working Group) and, from the beginning, all the activity for the national standardization of geo-data production that, at the moment, are the only guide line used in Italy.

From the 2000 he has been teacher in cartography by University of Siena, where was organized different level of course for students.

He was also president in the Romanic-Hellenic Division of UNGENG.

He had the responsibility to coordinate more than 300 technical people, in IGM, that are involved in geo-data production, for national scope or international, in particular in activity (Management Board), about project of EUROGEOGRAPHICS, an international organization non-profit created to coordinate the activities of European mapping Agency

Team-working abilities, adaptable, capacity to work in any environment, civilian or military;

MAIN ACTIVITY

- 1986: public disaster intervention for landslide control flood (Valtellina)
- 1987: Geodesic works for triangulation measurements in Tuscany ;
- 1989: production of the IGM vector orography database
- 1990: definition of standards for digital data exchange formats, raster and vector, in the context of the international WG DGIWG (Digital Geographic Information Working Group) ;
- 1990: production of vector data from existing small-scale cartography;
- 1991: Production of the first color-coded raster cartography according to international specifications;

- 1995: completion of the medium-resolution DTM, from existing cartography, of the entire national territory;
- 1997 : design and production of the IGM toponym DB;
- 2000: drafting of the new specifications of the national DTM (Digital Terrain Model), within the State-Regions Agreement agreement;
- 2000: Production of data relating to the "Sistema Cartografico di Riferimento " - State-Regions agreement;
- 2002: tester cartographic database of the "Parco Nazionale del Gargano";
- 2004: head of the FFAA cartographic unit operation "Antica Babilonia" in Nassiria (IRAQ);
- 2006: participation in WGs as part of the State-Regions-Local Authorities Agreement for the creation of the "specifications for the creation of topographic databases of general interest"
- 2009: drafting of technical documents in the "Committee for Technical Rules on Public Administration Data";
- 2011: testing of the regional database of Puglia;
- 2012: testing of flights and AGEA (Agency for Agricultural Disbursement) data with national coverage;
- 2013: progetti internazionali ERM (Euro Regional Map), EGM (Euro Global Map) ed EBM (EuroBoundary Map) all'interno di accordi con associazione Eurogeographics; international ERM (Euro Regional Map), EGM (Euro Global Map) and EBM (EuroBoundary Map) projects within agreements with the Eurogeographic association;
- 2014: tester database and cartographic products of the Basilicata Region

COURSES AS A TEACHER

"Fisica" - Istituto Tecnico Industriale - provincia Foggia
 "Teoria degli Errori" - IGM 1988
 "Istituzione di matematica" - IGM 1989
 "Elementi di informatica" - IGM School 1991
 "Metodi matematici per il trattamento dati osservati" - IGM 1992-4
 "Cartografia Numerica" - IGM 1993-4 e 1997- 98
 "Elementi di informatica e programmazione" - IGM 1997
 "Fotogrammetria e Cartografia Numerica" UNISI 2000/2001
 "Cartografia Numerica" - UNISI from 2001 to 2024

PUBBLICAZIONI

G. AFELTRA E .G. AMADIO "PROGRAMMA DI CALCOLO PER LA CORREZIONE GEOMETRICA DI PRECISIONE DI IMMAGINI IN FORMA DIGITALE" - BOLLETTINO DI GEODESIA E SCIENZE AFFINI – 1990

G. AFELTRA "BANCA DATI TOPONIMI I.G.M."- MONDO GIS – ANNO II N. 7 DEL 1997

G. AFELTRA E G. SABATINO "VECTOR MAP LVEL 1" - BOLLETTINO DI GEODESIA E SCIENZE AFFINI - ANNO LVII N. 2 DEL 1998

G. AFELTRA E G. AMADIO – "I PARAMETRI DI QUALITÀ NELLE INFORMAZIONI GEOGRAFICHE: ALCUNE ESPERIENZE DI VERIFICA" - ATTI DEL 5° CONVEGNO ASITA – RIMINI 2001

G. AFELTRA "LE BASI DATI I.G.M." - ATTI CONVEGNO UTENTI ESRI 2002

G. AFELTRA "LA DERIVAZIONE DEL DB_25 DAL DB REGIONALE" - CONGRESSO GEOMETRI BERGAMO – 2002

G. AFELTRA "LA CARTOGRAFIA ED I DB A PICCOLA SCALA" - ATTI CONVEGNO ANUTEI - FIRENZE 2002

G. AFELTRA "ALLESTIMENTO DEL DB_1000 DA PARTE DELL'IGM IN AMBITO EGM" - ATTI 6° CONVEGNO ASITA 2002

G. AFELTRA E F. GUZZETI "ALCUNE ESPERIENZE DI PRODUZIONE DI DTM DA FOTOGRAMMETRIA DIGITALE , MEDIANTE CORRELAZIONE AUTOMATICA, NELLA CARTOGRAFIA TECNICA REGIONALE 2003

MOTHER TONGUE

ITALIAN

OTHER LANGUAGE

INGLESE

- *Reading skills*
- *Writing skills*
- *Verbal skills*

Intermediate

Intermediate

Intermediate