



Vincenzo Manzari

Date of birth: 07/12/1987 | **Nationality:** Italian | **Gender:** Male | **Phone number:**

(+39) 3497342403 (Mobile) | **Email address:** manzari.vincenzo@gmail.com |

Email address: vincenzo.manzari@marina.difesa.it | **Skype:** vincenzo.manzari |

Address: Viale di Centocelle 301, Aeroporto di Centocelle – Palazzo Guidoni,
00175, Rome, Italy (Work)

WORK EXPERIENCE

06/11/2023 – CURRENT Rome, Italy

HEAD OF 1ST SECTION - LIGHTWEIGHT TORPEDOES ITALIAN MOD - GENERAL SECRETARIAT OF DEFENSE AND DIRECTORATE OF NAVAL ARMAMENTS (NAVARM)

Responsible for:

- the study and technical development, procurement and upgrade of lightweight torpedoes.
- the development of all contract activity in the area of competence with the related technical-administrative management of contracts.

Appointed as Alternate Technical National point of Contact for European and NATO projects in the areas of expertise, from lightweight torpedoes to autonomous vehicles, with relative sensors and payloads, related to the maritime domain and specifically underwater.

29/08/2021 – 05/11/2022 Taranto, Italy

HEAD OF TECHNICAL OPERATIONS DEPARTMENT AIRCRAFT CARRIER CAVOUR - ITALIAN NAVY

The aircraft carrier Cavour, flagship of the Italian Navy, presents a very high technical complexity of the Combat System (CS). The Technical-Operations (TO) Department, of which I am the Head, is responsible for the efficiency of the whole Combat System.

Under the orders of the Operations Chief Officer, I am responsible for the efficiency of the following subsystems:

- sensors (radar, sonar and electronic warfare)
- both internal and external telecommunication systems in all frequencies (from LF to satellite systems, from on-board telephones to tactical nodes)
- armament (both conventional and missile)
- navigation aid systems, e.g. gyrocompasses
- CMS (Combat Management System), the real brain that merges all the inputs of the CS
- ICT system (both hardware and software).

I have in my employ a sub-lieutenant technical Officer, and 30 specialized technicians, subdivided into 4 branches according to competence.

In order to maintain the combat system in full efficiency, I direct all its maintenance and organizational and experimental activities. To do this, I manage the periodic survey of equipment performance, updating the technical documentation, and investigating the causes of any failures for which I draw up technical reports aiming to limit the number of those failures.

In all this, I ensure that the personnel of the Department are familiar with and apply the safety rules provided for by current legislation.

In addition to these main tasks, I am also the officer in charge of the CBRN (Chemical, Biological, Radiological and Nuclear) defense, coordinating technical and tactical elements to employ the defense means, reporting directly to the XO. I also take care of the training of personnel in CBRN defense.

Last but not least, I am the CISO (Communications and Information Systems Officer), therefore I am also responsible for the correct management of the classified ICT systems, in line with the legal regulations and provisions issued by higher-level Commands.

Business or Sector Public administration and defence; compulsory social security |

Department Technical Operations |

Address Viale Jonio 2 - Stazione Navale Mar Grande (Navy Base), 74121, Taranto, Italy |

Email vincenzo.manzari@marina.difesa.it | **Website** <https://www.marina.difesa.it/Pagine/default.aspx>

Link <https://www.marina.difesa.it/EN/thefleet/home/Pagine/cavour.aspx>

19/04/2020 – 28/08/2021 La Spezia, Italy

HEAD OF UNDERWATER DEFENSE SECTION NAVAL SUPPORT AND EXPERIMENTATION CENTRE - ITALIAN NAVY

03/11/2015 – 18/04/2020 La Spezia, Italy

OFFICER IN CHARGE OF THE AUTONOMOUS SYSTEMS BRANCH - UNDERWATER WARFARE OFFICE NAVAL SUPPORT AND EXPERIMENTATION CENTRE - ITALIAN NAVY

19/10/2014 – 02/11/2015 La Spezia, Italy

CHIEF ENGINEERING OFFICER ITS VIRGINIO FASAN (FREMM CLASS) - ITALIAN NAVY

01/12/2013 – 18/10/2014 La Spezia, Italy

HEAD OF WEAPONS ENGINEERING BRANCH ITS VIRGINIO FASAN (FREMM CLASS) - ITALIAN NAVY

17/09/2006 – CURRENT Italy

NAVY WEAPON ENGINEER OFFICER ITALIAN NAVY - MINISTRY OF DEFENSE

07/09/2008 – 11/07/2009 Livorno, Italy

MILITARY ACADEMY INSTRUCTOR NAVAL ACADEMY - ITALIAN NAVY

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1
FRENCH	C2	C2	B2	B2	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● EDUCATION AND TRAINING

12/2019 – 04/2020 Venezia, Italy

LEVEL II UNIVERSITY MASTER'S DEGREE IN "STRATEGIC STUDIES AND INTERNATIONAL SECURITY" University Ca' Foscari (Venice)

Address Dorsoduro, 3246, 30123, Venezia, Italy |

Website <https://www.cafoscarichallengeschool.it/master/studi-strategici-e-sicurezza-internazionale/> |

Thesis Artificial Intelligence as the last frontier of war: current and future applications

29/10/2015 – 08/05/2019 Pisa, Italy

PHD IN INFORMATION ENGINEERING University of Pisa - Department of Information Engineering

Address Via G. Caruso 16, 56122, Pisa, Italy | **Website** <https://phd.dii.unipi.it/en/> | **Field of study** Marine Robotics |

Level in EQF EQF level 8 |

Thesis INCREASING THE AUTONOMY OF UNDERWATER VEHICLES OPERATIONS: LONG-ENDURANCE AND PRECISE NAVIGATION

19/06/2013 Pisa, Italy

PROFESSIONAL QUALIFICATION - INFORMATION ENGINEER University of Pisa - Department of Information Engineering

Voto 223/240

Address Via G. Caruso 16, 56122, Pisa, Italy

26/05/2013 – 05/12/2013 Taranto, Italy

WEAPONS AND OPERATIONS ENGINEERING CERTIFICATION COURSE Italian Navy Training Center (MARICENTADD)

Address Via Orate, 4, 74122, Taranto, Italy |

Website https://www.marina.difesa.it/il-tuo-futuro-e-il-mare/formazione-in-marina/formazione_specialistica/maricentadd/Pagine/default.aspx

05/05/2013 – 23/05/2013 Chiavari (GE), Italy

DESIGN AND MANAGEMENT OF LOCAL ETHERNET NETWORKS COURSE Joint Telecommunications School (STELMILIT)

In una prima fase, partendo dallo studio teorico delle LAN/MAN/WAN e relativi mezzi trasmissivi utilizzabili, si sono approfonditi gli standard di cablaggio EIA/TIA e ISO/IEC, e tutti i componenti di una rete secondo la pila ISO/OSI.

In una seconda fase, si sono approfonditi i concetti e algoritmi di routing IP, DNS, i protocolli ARP, ICMP, DHCP, TCP, NBT-SMB.

Al corso, oggetto di esami intermedi e di esame finale, mi sono classificato 1° su 15 frequentatori.

Address Via Parma 34, 16043, Chiavari (GE), Italy |

Website https://www.difesa.it/SMD_/EntiMI/STELMILIT/Pagine/default.aspx

03/10/2010 – 21/04/2013 Pisa, Italy

MASTER'S DEGREE IN TELECOMMUNICATIONS ENGINEERING University of Pisa - Department of Information Engineering

Studio approfondito degli aspetti teorico-scientifici delle discipline matematiche e fisiche e delle altre materie di base dell'ingegneria, con particolare riguardo a quelli dell'Ingegneria delle Telecomunicazioni, e in più in particolare del settore Elaborazione dei segnali e Telerilevamento, essendo in grado di comprendere l'impatto delle soluzioni ingegneristiche nel contesto sociale e fisico-ambientale; conoscenza dei contesti aziendali e della cultura d'impresa; comunicazione efficace in lingua Inglese.

Tesi dal titolo: Studio dei criteri di progetto per un radar banda VHF+S navale; vincitore premio «Fondazione Ugo Tiberio» 2014 - Voto di Laurea 110/110 *cum laude*

Level in EQF EQF level 7

01/10/2006 – 17/06/2010 Pisa, Italy

BACHELOR'S DEGREE IN TELECOMMUNICATIONS ENGINEERING University of Pisa - Department of Information Engineering

Studio degli aspetti metodologico-operativi della matematica e delle altre scienze di base, utilizzando tale conoscenza per interpretare e descrivere i problemi dell'ingegneria; sviluppo della capacità di utilizzare tecniche e strumenti per la progettazione di componenti, sistemi, processi; capacità di condurre esperimenti e di analizzarne e interpretarne i dati.

Tesi sull'argomento: tecniche di *tunneling* nella migrazione da IPV4 a IPV6 - Voto di Laurea: 110/110 *cum laude*

Level in EQF EQF level 6

16/09/2001 – 04/07/2006 Bari, Italy

DIPLOMA OF COMPUTER SCIENCE EXPERT - ABACUS COURSE ITIS Guglielmo Marconi

Studio dei Sistemi di elaborazione e trasmissione dell'informazioni: reti e protocolli (IPv4, IPv6), progettazione infrastrutture di rete, gestione di database e sistemi informativi (PHP, SQL, MySQL), fondamenti di Elettronica Digitale e Calcolo Statistico.

Level in EQF EQF level 5

● **DIGITAL SKILLS**

Digital Skills - Test Results

 Information and data literacy	ADVANCED	Level 6 / 6
 Communication and collaboration	ADVANCED	Level 6 / 6
 Digital content creation	ADVANCED	Level 6 / 6
 Safety	ADVANCED	Level 6 / 6
 Problem solving	ADVANCED	Level 6 / 6

Results from [self-assessment](#) based on [The Digital Competence Framework 2.1](#)

My Digital Skills

Proficient MATLAB User | Very good knowledge of MS Office (Outlook Word PowerPoint Excel) | Linux Ubuntu | Proficient User of Latex | C++ | Python | Robot operating system - ROS | Git

● **DRIVING LICENCE**

Driving Licence: AM

Driving Licence: B

● **PUBLICATIONS**

2016

[**WAVE: A wave energy recovery module for long endurance gliders and AUVs**](#)

OCEANS 2016 MTS/IEEE Monterey

2020

[**Interoperability among Unmanned Maritime Vehicles: review and first in-field experimentation**](#)

Frontiers in Robotics and AI, Volume 7, DOI=10.3389/frobt.2020.00091, ISSN=2296-9144

2018

[**Towards an autonomous underwater vehicles test range: At-sea experimentation of bearing-only tracking algorithms**](#)

Annual Reviews in Control, Volume 46, ISSN 1367-5788, doi.org/10.1016/j.arcontrol.2018.10.007

2020

[**Marine Robots for Underwater Surveillance**](#)

2018

[At-Sea NATO Operational Experimentation with Interoperable Underwater Assets Using Different Robotic Middlewares](#)

Technology and Science for the Ships of the Future: Proceedings of NAV 2018

2020

[Dynamic parameters identification for a longitudinal model of an AUV exploiting experimental data](#)

2020

[Comparative analysis of EKF and Particle Filter performance for an acoustic tracking system for AUVs exploiting bearing-only measurements](#)

Global Oceans 2020: Singapore–US Gulf Coast. IEEE, 2020

2020

[Geo-referenced visual data for Posidonia Oceanica coverage using audio for data synchronization](#)

Global Oceans 2020: Singapore–US Gulf Coast. IEEE, 2020.

2020

[Ship acoustic signature measurements by using an AUV mounted vector sensor](#)

Global Oceans 2020: Singapore–US Gulf Coast, 2020

2021

[The 2019 JANUS interoperability fest: A field report](#)

Marine Technology Society Journal, 2021

2021

[ASV acoustically tracking and following an AUV: preliminary experimental evaluation](#)

OCEANS 2021: San Diego–Porto, 2021

2021

[Localisation Approaches for Underwater Autonomy within the EUMarineRobots H2020 project: experimental activity at SEALab](#)

OCEANS 2021: San Diego–Porto, 2021

2022

[Passive bearing estimation using a 2-D acoustic vector sensor mounted on a hybrid autonomous underwater vehicle](#)

IEEE Journal of Oceanic Engineering, 2022

2022

[Mechatronic Design of an Underwater Multisensor System for Optical Data Acquisition](#)

The International Conference of IFToMM ITALY, 2022

2022

[Autonomous underwater environment perceiving and modeling: An experimental campaign with FeelHippo AUV for forward looking sonar-based automatic target recognition and data association](#)

IEEE Journal of Oceanic Engineering, 2022