

# Curriculum Vitae of Giancarmine Fasano



## Personal information

First name(s) / Surname(s) **Giancarmine / Fasano**  
Address(es) Department of Industrial Engineering, University of Naples "Federico II",  
Piazzale Tecchio 80, 80125 Naples, Italy  
Telephone(s) +39 0817682361  
Fax(es) +39 0817682160  
E-mail g.fasano@unina.it, giancarmine.fasano@unina.it

## Work experience

Dates	January 2012 - date
Occupation or position held	Assistant Professor
Main activities and responsibilities	Investigator in Aerospace Systems research programs
Name and address of employer	Department of Industrial Engineering, University of Naples "Federico II"
Dates	July 2008 – December 2011
Occupation or position held	Ph. D. researcher
Main activities and responsibilities	Co-investigator in Aerospace Systems research programs
Name and address of employer	Department of Aerospace Engineering, University of Naples "Federico II"
Dates	December 2006 – May 2007, November 2007 - April 2008
Occupation or position held	Contract researcher
Main activities and responsibilities	Co-investigator in Aerospace Remote Sensing Research programs
Name and address of employer	Consortium for Research on Advanced Remote Sensing Systems (CO.RI.S.T.A.)
Dates	July 2004 – March 2005, March 2006, April 2008 – May 2008
Occupation or position held	Contract researcher
Main activities and responsibilities	Co-investigator in Aerospace Systems research programs
Name and address of employer	Department of Aerospace And Mechanical Engineering, Second University of Naples

## Education and training

Date	December, 7 <sup>th</sup> , 2007
Title of qualification awarded	Ph.D. degree, with excellence, in Aerospace, Naval and Total Quality Management Engineering, thesis dissertation entitled "Multisensor Based Fully Autonomous Non-Cooperative Collision Avoidance System for UAVs", tutor prof. A. Moccia
Name and type of organisation providing education and training	Faculty of Engineering, University of Naples "Federico II", state university
Date	May, 24 <sup>th</sup> , 2004
Title of qualification awarded	Laurea degree in Aerospace Engineering (5 years), summa cum laude, thesis dissertation on design and simulation of a bistatic/interferometric mission based on COSMO/SkyMed constellation, tutor prof. A. Moccia, co-tutor prof. M. D'Errico
Name and type of organisation providing education and training	Faculty of Engineering, University of Naples "Federico II", state university

## Personal skills and competences

Mother tongue(s) **Italian**

Other language(s) **English**

## Scientific skills and competences

2005-date Co-tutor of several "laurea" theses  
2005-date Lecturer in the framework of university courses in aerospace systems, aerospace plants, aerospace remote sensing systems  
2012-date Lecturer in "Unmanned Aircraft Systems"

The research activities in the field of aeronautics mainly deal with system design, software development and flight tests of Sense & Avoid systems for UAVs. In the latest years he has collaborated with the Italian Aerospace Research Centre (CIRA) within the TECVOL project, developing and successfully testing in flight a non-cooperative multi-sensor obstacle detection and tracking system. Recent research interests also comprise integrated navigation systems, and guidance and control of micro-UAS.

In the space field, Dr. Fasano has worked on mission design for distributed space systems, dealing with formation flying dynamics, interferometric and bistatic SAR missions, sparse aperture SAR systems. He is also interested in attitude sensors and active/passive vision-based relative navigation. He took part in several research projects in collaboration with the Second University of Naples, the Consortium for Research in Advanced Remote Sensing Systems (CO.RI.S.T.A.), and the Italian Space Agency.

2014 - date Member of the AIAA (American Institute of Aeronautics and Astronautics) Sensor Systems and Information Fusion Technical Committee

2014 - date Member of the ICUAS'15 (International Conference on Unmanned Aircraft Systems) International Program Committee

2011 - date Member of the IAA (International Academy of Astronautics) Program Committee on Small Satellite Missions. Rapporteur of session B4.7B "Small distributed space systems" within the International Astronautical Congress

2010 - 2012 Member of a Study Group of the International Academy of Astronautics ("Distributed Space Missions for Earth System Monitoring").

2005 - date Speaker in several national and international conferences

2011 Invited speaker at a workshop on Sense and Avoid organized by Armasisuisse and RUAG Aerospace in Thun, Switzerland

2014 Principal investigator of the research project "i-TEAMS: innovative TEchniques for Autonomous Micro-UAV Swarms", funded after successful peer review-based evaluation in the framework of the STAR Program supported by Università di Napoli "Federico II" with the financial contribution of Compagnia di San Paolo and Istituto Banco di Napoli - Fondazione.

Referee for international journals:

- Earth, Moon and Planets, Springer
- Journal of Aircraft, AIAA
- International Journal of Advanced Robotic Systems, Intech
- Acta Astronautica, Elsevier
- Advances in Space Research, Elsevier
- Aerospace Science and Technology, Elsevier
- IEEE Transactions on Industrial Electronics
- Journal of Navigation, Cambridge
- Sensors, MDPI

Author of more than 70 scientific papers published in international journals or in conference proceedings or as book chapters (see publications list below), which gained more than 200 citations in technical literature and international patents

Technical skills and competences

Large experience in design, development and test of real time software for aerospace applications, based on different languages, and built for conventional or real time operating systems.  
Designer and developer of flight software for electro-optical and radar data acquisition and real time processing.  
Designer and Developer of ground software for flight test control.  
Designer and Developer of hardware-in-the-loop systems for real time simulation of aerospace systems.

**Annex**

Publications list: check website