

	Curriculum Vitae	Code: DMG-HRD-CVISMCC Issue: 2.0 Date: 23/05/2023 Page: 1 / 4
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Personal Data					
Name:	Simone		Surname:	Centuori	
Date of Birth:			Nationality:	Italian	
Education					
Academic Degree:	MsC Aerospace engineering – Politecnico di Milano, Italy		Starting Year:	1998	Finishing Year: 2004
Academic Degree:	Degree in Philosophy of Science and Technology, UNED, Spain		Starting Year:	2010	Finishing Year: 2017
Languages					
English					
Reading Level:	Proficient	Writing Level:	Proficient	Speaking Level:	Proficient
Italian					
Reading Level:	Mother tongue	Writing Level:	Mother tongue	Speaking Level:	Mother tongue
Spanish					
Reading Level:	Proficient	Writing Level:	Proficient	Speaking Level:	Proficient
French					
Reading Level:	Medium (B2)	Writing Level:	Medium (B2)	Speaking Level:	Medium (B2)
Summary					
Profile:	<p>Flight Segment Director in DEIMOS.</p> <p>Experience in Earth observation and interplanetary mission analysis, End-to-End simulation, Space Situational Awareness, debris mitigation, space science missions, software tool development.</p> <p>Very interested in emerging technologies analysis.</p>				
Experience					
Career Summary:	2023 - current	DEIMOS Space, Flight Segment Director			
	2020 – 2022	DEIMOS Space, Flight Systems BU head			
	2016 - 2020:	DEIMOS Space, Division head of Mission Analysis and Navigation			
	2015 - 2016:	DEIMOS Space, Project Manager in interplanetary mission analysis			
	2009 - 2015:	GMV, Aerospace, Project Manager in Earth observation			
	2007 - 2009:	GMV, Aerospace, Project Engineer in interplanetary mission analysis			
	2006 - 2007:	ESA ESTEC, Advanced Concept Team, System Engineer			
	2005 - 2006:	IBM, Marketing Intelligence, Stagiaire			

Activities	Projects and activities:	<p>Main activities and responsibilities as a Project Manager in DEIMOS:</p> <ul style="list-style-type: none"> - AutoABK. Design of the GNC strategy for ESA mission EnVision autonomous aero-braking around Venus - MSR-ERO. Mission analysis for MSR ERO mission in the TAS-I led consortium - APIS. Optimisation of low-thrust round-trip trajectories to more than 4,000 objects for asteroid mining company TransAstra - VIGORIDE. Mission analysis and navigation of the MOMENTUS company upper stage for transfers to GEO, the Moon and asteroids. - G2BOB1. Replenishment and EP navigation and autonomy analysis for Galileo 2nd generation constellation - ISPACE-LLM1. Trajectory design for the lunar lander mission of Japanese company ispace. - MSRAAS. Architecture assessment of Mars Sample Return, led by DEIMOS in collaboration with Lockheed Martin and MDA. - JUICEPP. Planetary Protection study for the mission JUICE, dedicated to Jovian Moons tour - P3CDE1. Mission analysis for Proba-3 phase C-D-E1, ESA's – and the world's – first precision formation flying mission. - PhSR-A. Mission analysis for the ESA-Roscosmos sample return mission to Phobos. <p>Main activities and responsibilities as a Project Manager in GMV:</p> <ul style="list-style-type: none"> - SS-E2ES. ESA-GSP study to define End-to-End simulators for space science missions. - FLEX phase A/B1. Mission analysis for FLEX, candidate missions as 8th Earth explorer. - BIOMASS phase A. Mission analysis for BIOMASS, selected as ESA 7th Earth Explorer Core missions. - SAT-AIS phase B1. Mission analysis for SAT-AIS, an ESA and EMSA joint programme for maritime surveillance - DOCOMAS: Deep Space Optical Communications Architecture mission analysis. - IOD. Analysis of cloud coverage impact for a laser communication system on a LEO satellite - EOTOOL. Creation of EOTOOL, a mission analysis library for Earth observation developed in Matlab. - CAT. Conjunction Analysis Tool for space debris and launch window developed in Fortran 90. <p>Main activities and responsibilities as a Project Engineer in GMV:</p> <ul style="list-style-type: none"> - IODisplay. H2020 project to identify and down-select a portfolio of In-Orbit Demonstration (IOD) missions. - SBSS-DM. Assessment Study for Space Based Space Surveillance Demonstration Mission. - TMOT. Development of a multi-satellite and multi-instrument simulator for mission-related products. - RT-LANDER. Extension of interplanetary orbit determination facilities at ESOC to include lander position determination. - RC-SIM. E2ES to test radio Science capabilities. - NanoCAM. Analysis of cloud coverage impact optical missions. - Marco Polo. Low thrust trajectories for Marco Polo in the frame of ESA Cosmic Vision programme. - LAREDO. Upgrade of LAREDO, a tool for launching optimisation and rendezvous and docking simulation. - ORBIMAT. Upgrade of ORBIMAT, a GMV orbit calculator and mission analysis tool. - CSTS. Mission analysis and trajectory design for the Lunar Crew Space Transportation System, a joint ESA-Roscosmos project - 3rd Global Trajectory Optimization Competition
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		Main activities and responsibilities at ESA ACT: <ul style="list-style-type: none"> - ACT Research Activity. Research studies on emerging technologies and system concepts for space application. - ESMO. System engineering for the European Satellite Moon Orbiter at ESA Concurrent Design Facility. - 2nd Global Trajectory Optimization Competition. - Space Integrated Application Activity. Assessment of space systems applications for the development of new services to the citizens and many specific communities in different domains. - Ariadna Programme Coordination. Coordination of Ariadna programme, the ESA programme for interaction with Academia. (http://www.esa.int/gsp/ACT/ariadna/index.htm) Main activities and responsibilities in IBM: <ul style="list-style-type: none"> - Data analysis and management within IBM Marketing Data Base and Marketing Intelligence teams
Technical and Managerial Skills:	Technical Skills:	<ul style="list-style-type: none"> - Interplanetary mission analysis - Earth observation mission analysis - Constellations and formations - Scientific mission - Space Systems and Technologies - Systems Engineering - Celestial mechanics - Space debris
	Technical Tools:	Internal and external system/mission analysis tools
	Managerial Skills:	<ul style="list-style-type: none"> - Management and financial proposal preparation - Project planning, management and control - Team coordination - Subcontractors coordination - Customer relationship management - Risk analysis
	Managerial Tools:	Project insight, Redmine, Microsoft Project
Technologies:	Operating Systems:	Mac OS X, Linux, Unix, Windows
	Programming Languages:	MATLAB, Fortran, C, C++
Training		
Risk Management:	GMV Department of Technologies	Year: 2015 Duration: 8h
Project Management:	GMV Department of Technologies	Year: 2011 Duration: 16h
Remote Sensing:	Universidad Politecnica de Madrid	Year: 2009 Duration: 40h
Analytical optimisation of Low thrust space trajectories:	MV Department of Advanced Space System and Technology	Year: 2008 Duration: 8h
C++ programming:	CETICSA – Formation & Consultancy	Year: 2008 Duration: 20h
Software Engineering:	GMV Department of Technologies	Year: 2007 Duration: 30h
Spacecraft Systems Engineering:	University of Southampton at ESTEC	Year: 2006 Duration: 20h
Another Data		

Presentations/ Publications/ Papers:

S. Centuori, P. Hermosín, J. Martín, G. De Zaiacomo, C. Stroud, A. Godfrey, M.T. Johnson, H. Johnson, T. Sachdev, R. Ahmed, "Mars Sample Return Architecture Assessment Study", 69th International Astronautical Congress (IAC), Bremen, Germany, 01st -05th October 2018

S. Centuori, J. Martín, J.L. Cano, G. De Zaiacomo, "Trajectories Design Of A Sample Return Mission To Phobos", 67th International Astronautical Congress, Guadalajara, Mexico

S. Centuori, C. de Negueruela, K. Ergenzinger, L. Iess, M. Gregnanin, R.Cole, S.Baker, R. Franco, "SS-E2E: Mission Performance Simulators For Space Science Missions", SESP 2015,

S. Centuori, F. E. Aleman, M. Di Benedetto, L. Iess, A. Graziani, A. Palli, N. Pierdicca, R. Prieto-Cerdeira, P. Racioppa, D. Toledano, P. Tortora, "RC-SIM: radiocomm signals for retrieval of planetary geophysical parameters", 62nd International Astronautical Congress 2011, Cape Town, October 2011

E. Babio, P. Hermosín, S. Centuori, "Hybrid trajectories optimization for interplanetary missions – The MSR-ERO case", 70th International Astronautical Congress, Washington DC, USA, October 2019

P. Hermosín, J. Martín, S. Centuori, E. Ecale, A. Boutonnet, C. Erd, "JUICE planetary protection analysis", 70th International Astronautical Congress, Washington DC, USA, October 2019

J.P. Zamora Bonilla, S. Centuori, "To Mine or Not to Mine? Using Game Theory to Explain the Decision-Making Process in Asteroid Mining Investigations", Chapter 12 in Handbook of Research on Industrial Advancement in Scientific Knowledge, Published in the United States of America by IGI Global, 2019

P. Hermosín, S. Centuori, D. Riley, O. Turnbull, I. Gerth, L. Corpaccioli, "Trajectory Optimisation for the ESA Lagrange Mission to Sun-Earth L5", 69th International Astronautical Congress (IAC), Bremen, Germany, 01st -05th October 2018

G. De Zaiacomo, I. Pontijas Fuentes, S. Centuori, P. Hermosín, H. Johnson, "Mars Sample Return: Entry Descent and Landing Analyses for Architecture Assessment Study", HiSST: International Conference on High-Speed Vehicle Science Technology, 26-29 November 2018, Moscow, Russia

P. Hermosín, J. Martín, S. Centuori, E. Babio, J.L. Cano, "LOTNAV: A Low-Thrust Interplanetary Navigation Tool", 7th International Conference on Astrodynamics Tools and Techniques (ICATT), DLR Oberpfaffenhofen (Munich, Germany) 6th -9th November 2018

M. Vetrivano, J. L. Cano and S. Centuori, "The High-fidelity Asteroid Deflection Evaluation Software (HADES): Assessing the Impact of Environmental and System Uncertainties on Autonomous Proximity Operations", 26th International Symposium on Space Flight Dynamics ISSFD, June 3-9, 2017, Matsuyama, Japan

J. Martín and S. Centuori, "Quasi-Satellite Orbits around Phobos for the Sample Return Mission", 26th International Symposium on Space Flight Dynamics ISSFD, June 3-9, 2017, Matsuyama, Japan

C. Corral, R. Cadenas, S. Centuori, "Trajectories to/from the Earth-Moon Lagrangian points L1 and L2 for the human exploration of the Moon", European Workshop on Space Mission Analysis at ESA/ESOC, Darmstadt, Germany, December, 2007

M. Vetrivano, J.L. Cano, S. Centuori, "Asteroid proximity operations using the High-fidelity Asteroid Deflection Evaluation software (HADES)", Stardust Final Conference, ESTEC, The Netherlands, November 2016

Izzo D., Vinko, T., Bombardelli C., Brendelberger S., Centuori S., "Automated asteroid selection for a Grand Tour Mission", 58th International Astronautical Congress, Hyderabad, India, September 2007.

G. Gaias, S. Centuori, M.R. Lavagna, A. Da Costa, E. A. Finzi, "Long Term Space Program Scheduling and System Design Optimization", 56th International Astronautical Congress, Fukuoka, Japan, October 2005.

Additional Data:

Awarded in the flagship mission category during the final session of the Aurora Student Design Contest with the "PROMETEO" Mars Sample Return project