






Gian Luigi SOMMA

Aerospace Engineer

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Passionate aerospace engineer with 10+ years experience in the field, eager to embark on new challenging projects. Proficient in 10+ programming language with a 13+ year experience. Proven record as a thermal, mechanical, and system engineer for small satellites, ESA, and DLR.

WORK EXPERIENCE

- 2018 / - **Software Engineer**, University of Cambridge, U.K.
Improving performances and testing research software. Built a continuous integration and delivery system with GitHub and Circle Ci. Two publications are in preparations.
- 2015 / 19 **PhD on Space Debris Modelling**, University of Southampton, U.K.
Developed and published a new space debris model with an innovative feedback controller.
- 2017 / 18 **System Engineer for the UoS3 CubeSat Mission**, University of Southampton, U.K.
Coached the winning CubeSat team of the ESA competition "Fly your Satellite!". Implemented an inventory for satellite parts.
- 2017 / 17 **Researcher**, Department of Aerospace Science and Technology, Politecnico di Milano, Italy
Fostered academic collaboration on space debris as visiting scientist.
- 2013 / 14 **Researcher**, School of Aerospace Engineering, "Sapienza" University of Rome, Italy
Discovered and published Mars orbits that maximised the dwell time with satellites.
- 2012 / 13 **Space Propulsion Intern**, DLR, Germany
Developed and optimised a model of a cryogenic test-bench to validate experimental results.
- 2008 / 09 **Thermal Engineer**, European Space Agency, European Student Moon Orbiter, Phase B
Engineered thermal solutions to ensure the survival of a lunar orbiter in worst-case scenarios.
- 2008 / 09 **Structural Engineer**, Student Space Exploration and Technology Initiative, Phase A
Designed and evaluated (CAM/FEM) preliminary configurations of a small satellite.
- 2005 / - **Full-stack Developer**, Self-employed
Convert customers' ideas and visions into modern and professional software and websites.
- 2004 / 15 **Astronomy and Astronautics Classes and Outreach Activities**, Self-employed
Spearheaded in astronomy classes and popular science events (talks, star parties) to spread culture and passion for space.

EDUCATION

- 2015 / (07-19) . **PhD in Space Debris Modelling**
Astronautics Research Group, University of Southampton, U.K.
- 2013 **Master's Degree in Astronautical Engineering** (110/110)
School of Aerospace Engineering; "Sapienza" University of Rome, Italy
- 2010 **Bachelor's Degree in Aerospace Engineering** (97/110)
"Sapienza" University of Rome, Italy

ENGINEERING AND COMPUTER SKILLS

Thermal Analysis and CFD	Esatan TMS, Ecosim
Data Modelling and Analysis	Matlab, Simulink, Excel.
CAD and ECAD	Solid Edge, Solid Works, Altium Designer, Ultimaker Cura.
Space Mission Analysis	Agi STK (Master and Advanced Modules Certification), GMAT.
Programming Languages	Ajax, Bash, C++, CSS, Fortran, Ecosim Language, HTML, JavaScript, JSON, LaTeX, Matlab, MySQL, PHP, R, Sass/SCSS, Visual Basic, XML, YML.
Software Development	Visual Studio, Linux, object-oriented programming, version control (Git, GitHub), Continuous integration and delivery (CircleCI).

TRANSFERABLE SKILLS

Written and verbal communication	2 peer-reviewed articles; 5 papers, 4 oral presentations, 2 interactive presentations, and 1 poster at international conferences.
Teamwork	Gained from experience in international projects and research groups.
Flexibility	Easily adapted to different roles in the industry and research field thanks to a proactive continuous learning attitude (e.g. via Lynda.com/LinkedIn learning)
Problem solving	Lateral and critical thinker with a creative mind and strong analytical skills.

AWARDS AND GRANTS

2017	Member of the winning team of the 2 nd edition of the ESA competition "Fly your Satellite!"
2014-17	Engineering and Physical Sciences Research Council Doctoral Training Studentship Grant
2014	Winner of the NASA competition "Mars Sample Return Project"

LANGUAGE PROFICIENCY

- **Italian:** native speaker
- **English:** fluent (IELTS)
- **French:** intermediate (DELF B2)
- **German, Russian:** beginner

I hereby authorise the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".

Date: 25 November 2019.

Signature: 