

RAMÓN GARCÍA ALARCIA

Space Systems Engineer. Research Associate at the Technical University of Munich (TUM).
Based in Munich (Germany) ◊ (+34) 620 566 185 ◊ ramon@rgalarcia.com ◊ www.rgalarcia.com

EDUCATION

Master's in Aerospace Engineering , ISAE-SUPAERO	2020 - 2022
Bachelor's in Aerospace Systems Engineering , UPC BarcelonaTech	2015 - 2020
Bachelor's in Telecommunication Systems Engineering , UPC BarcelonaTech	2015 - 2020

WORK EXPERIENCE

Research Associate <i>Technical University of Munich (TUM), Chair of Pico and Nano Satellites</i>	11/2022 - ongoing Munich, Germany
· Working on generative design of spacecraft.	
Orbitography Intern <i>Centre national d'études spatiales (CNES), Orbitography section</i>	05/2022 - 10/2022 Toulouse, France
· Implemented and tested Vision-Based Navigation algorithms for autonomous spacecraft navigation around asteroids.	
Systems & Software Engineer Intern <i>GTD Sistemas de Información, Space Division</i>	06/2019 - 07/2020 Barcelona, Spain
· Developed an internal avionics and flight SW simulator for launchers, focused on GNC algorithms in a defined avionics architecture.	

PROJECTS

Project Manager <i>Image Recording Instrument for Sunrise (IRIS)</i>	2020 - 2022
· Project Manager and Responsible of Software in the team behind the IRIS instrument, set to fly with the Max Planck Institute-led Sunrise III solar observation mission in 2022.	
Vice-Chair <i>4th Symposium on Space Educational Activities (SSEA)</i>	2020 - 2022
· Promoter of the organisation in Barcelona of the European Space Agency-led 4th SSEA, to be held in 2022. Vice-Chair leading and overseeing different work areas of the project.	
Electronics & Software Leader <i>Cloud chamber for high Altitude Detection of muons Under Special relativity effects (CADMUS)</i>	2017 - 2018
· Responsible of Electronics and Software for the CADMUS instrument, which flew to the near-space with the ESA's BEXUS Program in 2017.	
Research Participant <i>Institute for High Energy Physics (IFAE), International Astronomical Youth Camp (IAYC)</i>	2016 to 2018
· IFAE: Characterization of irradiated/non-irradiated Pixel Detectors for the High-Luminosity upgrade of the LHC (2016). · IAYC: Testing SimCADO simulator for the Extremely Large Telescope (2016), classification of galaxies using Machine Learning (2017), analysis of Earth-Moon-Earth spacecraft trajectories (2018).	

SKILLS & AWARDS

Languages	Spanish (Native), English (C2), French (C1), Italian (B2), Catalan (Native).
Programming	C, C++, Java, C#, Python, Matlab, PHP, JS, Bash, AWK, TensorFlow, Scikit-learn.
Design & Analysis	SolidWorks, Catia, XFRL5, Proteus, KiCad, CCS, Vitis/Vivado, Simulink, Wireshark.
Soft Skills	Team work, Leadership, Communication, Motivation, Curiosity, Commitment.
Other	B Driving License. EASA Private Pilot License theoretical exam.
Awards	DefInSpace (2021), SCAVENGE Data Challenge (2019), START Hack (2018), CopenHacks (2017), Barcelona's City Council Youth Research Prize (2015), Extraordinary Baccalaureate Prize (2015), University Access Distinction (2015).