

TAISIR AVILÉS

Data Scientist
Aerospace Engineer

@ taisir.aviles@gmail.com

in Contact me on LinkedIn

github.com/veotos

Space Debris: the origin

My blog

EXPERIENCE

- 2017 – 2018 **SSA Software Engineer** Deimos Space
Software development for projects related to Space Situational Awareness (DLR/ESA)
• Developed several back-end modules (Fortran/C++ and Python) for an orbital propagator and satellite cataloguer
• Built satellite reentry tools in Python that were used in events like the reentry of the space station Tiang-gong I
• Developed analysis tools to help to understand, to use and to take advantage of ground-based telescopes data and images
- 2014 – 2017 **Operations Engineer** E-USOC
Preparation and execution of DCMIX and GeoFlow experiments aboard ISS
• Prepared test-campaigns and in-situ tests
• Executed of operations of scientific experiments during onboard campaigns
• Developed images and data parsing scripts contributing to the internal tools of the organization
- 2013 – 2017 **CubeSat Engineer** E-USOC/Theia Space
Design and development of different subsystems of the QBITO and educational satellite ESAT
• Main developer of QAS (QBITO Attitude Simulator), a tailored dynamics, kinematics and environment simulator implemented in Matlab/Simulink. Used to validate new attitude controllers
• Designed, modelled and fabricated ESAT Attitude and Determination Subsystem and corresponding supporting material. Used in teaching activities
- 2011 – 2012 **Studentship** EADS, Structural Dynamics and Aeroelasticity Department
Impact numerical simulation activities
- 2009 – 2010 **Studentship** E.T.S.I.A, Numerical Aerodynamics
Support to numerical tools and methods. Teacher assistant. Preparation of lessons.

EDUCATION

- 2012 **Master's Degree in Aerospace Engineering** E.T.S.I.A, Polytechnical University of Madrid
Majoring in Spacecrafts
- 2013 **Columbus Systems Training** European Astronaut Center
- 2013 **Payload Expert Training** E-USOC/NASA
- 2014 **Operations Training for GSP** DLR/ESA
- 2013-2017 **Cybersecurity & Sensitive Unclassified Info Awareness** E-USOC/NASA

LANGUAGES

Spanish - native
English - proficient

TECHNOLOGIES

Python
C++/C
Fortran
PostgreSQL

HOBBIES

I love space and from time to time I enjoy writing technical documents in $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$.

I usually read scientific publications, both popular and specialized.

NON PROFIT

Teacher at primary school coding association. I help kids and not-so kids to understand the principles of programming and try to implement their ideas.

I own a 3D-printer and I have used different electronics platforms for small personal projects, which allows me to learn and teach.