PELAYO PEÑARROYA

AEROSPACE ENGINEER

(+34) 635 61 40 55 – pelayopero@gmail.com - LinkedIn

Work Experience

Deimos Space
2019 - Currently

Deimos Space S.L.U. – Mission Analysis & Navigation

Marie Skłodowska-Curie ESR.
STARDUST-R H2020 Project.
Intelligent Navigation and Control System for Minor Celestial Body Descent and Ascent.
GNC around Small Celestial Bodies.
Secondment at PoliMi (DAER-DART).

OHB System
2017 - 2019

OHB System Bremen – Mission Analysis & Flight Dynamics

Electric Propulsion transfer design and analysis.
Transfer attitude design and optimisation.
Orbit determination operational SW development.
Flight Dynamics System development.

Education

Technical University Delft
2015 - 2017

MSc Aerospace Engineering–Space Flight ***(Space Exploration)***

Thesis at OHB System: *Investigation of convex residual penalty functions for orbit determination:*

- Implementation of relevant measurement models including error simulations.
- Implementation and comparison of orbit determination algorithms using different residual optimization techniques.
- Evaluation of the robustness and accuracy of the implemented algorithms.

Profile courses: Mission Geometry and Orbit Design, Re-entry Systems, Rocket Motion, Satellite Data Processing.
Elective Courses: Astrodynamics II, Aircraft Performance Optimization, Spacecraft Attitude and Control, Planetary Sciences I & II, MicroSat.

University of León
2011 - 2015

BSc Aerospace Engineering

Profile Courses: Satellites, Rockets and Missiles, Flight Dynamics, Aircraft Calculus.
Thesis: Test Bench for Electrical Motors Design and Construction.

Other Studies

Professional Conservatory of Music of Oviedo
2005 - 2011

Professional Degree – Classical Guitar
Elective Courses: Musical computing, Musical management
Background: Elementary Conservatory of Moreda (1999 – 2005)

München Universität
2013

Introduction to Mathematical Philosophy

Competences

Languages

Spanish: Native
English: C1
German: B2
Italian: B2
French: B1

Computer Skills

Languages: C/C++, Python, Matlab.
Simulators and interfaces: STK, GMAT, WasP, LabVIEW Simulink, Visual Studio, Qt.
Desktop: Microsoft Office, LaTeX.
Graphic design: AutoCAD, AutoDESK, CATIA, Solid Works, Blender.

Publications

IAC - Bremen
2018

On the smoothing of slewing profiles for Low-Thrust Transfer trajectories

Algorithm to smooth out violations in AOCS and power.
Application of the algorithm to the Electra mission.

References and further information on request

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