LAURA MONTIRONI

PERSONAL INFORMATION

Innately fascinated by complex technical subjects and out-of-comfort-zone challenges, I love finding compromises and solutions, using a cocktail of creativity, empathy and analytical mindset.

WORK EXPERIENCES

January 2024 - Now

Airbus Commercial Aircraft - Toulouse

System and Air Traffic Management Program

The system and ATM program launches, follows and steers several aircraft system design projects with the objective of keep innovating, improve the customer satisfaction and keep Airbus product at the pace of the ATM world. I am responsible for various of our portfolio projects. In this context, I am also covering the role of project coordinator for the GEESE SESAR3 Project. This project was awarded by a European Commission funding and gathers around 20 different companies around Europe and not only.
Discover more about GEESE

January 2021 - December 2023

Airbus UpNext - Toulouse

Active control - Load Alleviation Function and Active Flutter Suppression

Within the Aircraft Design team of the eXtra-performance WING demonstrator, I was responsible for the Load Alleviation Function and Flutter Control Law design, as well as following several Flight Control System - Aircraft Design transversal topics. The demonstrator project consists in designing, manufacturing and testing a flying demonstrator.
Discover more about Airbus Upnext

Apr 2019 - Dec 2020

Airbus Commercial Aircraft - Toulouse

A350XWB EFCS Focal Point for Loads and Aeroelastics

Being the Flight Control system focal point for A350XWB within the Loads and Aeroelastics department, I was playing an active role in finding the good compromise between the flight control system design choices and their Loads and Aeroelastics impacts. In this context I was responsible for delivering the loads and aeroelastics flight test clearances for the flight control law development standards, as well as delivering the certification documents for failure cases and flight control law certified standards.
http://www.airbus.com

Sept 2018 - Mars 2019

Airbus Commercial Aircraft - Toulouse

EFCS Support for Loads and Aeroelastics

Moving my first steps in the technical field of Flight Control Law - Loads and Aeroelastics interactions, I supported several activities within the Loads and

Aeroelastics team in Toulouse.
http://www.airbus.com

PREVIOUS EXPERIENCES

Sept 2017 - Apr 2018

Airbus Commercial Aircraft - Hamburg

Loads and Aeroelastics Master Thesis Intern

I joined the Gust Loads & Aeroelatics team in Airbus Hamburg for eight months, in the context of an internship finalised to do some research activity for my Master Thesis. I analysed the feasibility of using Linearized Computational Fluid Dynamics to calculate flight loads in 1g trim state.
http://www.airbus.com

Sept 2016 - Apr 2017

Hyperloop Team Italia

Hyperloop Team Italia - Team Leader and Technical Advisor

Hyperloop Team Italia was one of the teams participating to the international SpaceX Hyperloop Pod Competition II.
My role was to organise the team and coordinate all the technical and non-technical activities, according to the competition deadlines and keeping all the team members involved and motivated. I was also representing the team in front of all the suppliers and industrial partners and sponsors we involved in our project.
http://www.spacex.com/hyperloop

Aug 2016 - Oct 2016

von Karman Institute for Fluid Dynamics

CFD Short Research Program

I spent 3 months in the Von Karman Institute for Fluid Dynamics in Belgium, in the context of a Short Research Program for which I was selected among several applicants. I worked on Multiphase Flows simulations using the software Fluent, for the Environmental and Applied Fluid Dynamics department.
https://www.vki.ac.be

Nov 2015 - Jan 2017

E-Team - Aerodynamics Division

Racing Car Student Team Member

E-Team Squadra Corse is the Racing Team carrying the flag of the University of Pisa to international Formula SAE and Formula Student Competitions. I designed the Front Wing of our 2016 racing car, and the cooling system configuration of our 2017 car. Besides of playing the "designer" role, I was also involved in the manufacturing phase of some composite parts of our car, as well as on the whole car final assembly phase.
http://www.eteamsquadracorse.it

Aug 2015 - Oct 2015

NASA - Caltech Jet Propulsion Laboratory

Heliophysics Image Processing Summer Intern

I served a Summer Internship at the Heliophysic Laboratory of the NASA Jet Propulsion Laboratory in Los Angeles. I conceived and implemented a code finalized to automatically post-process some telescope images of Saturn.
http://www.jpl.nasa.gov

EDUCATION

University of Pisa

Master Degree

Sept 2015 - July 2018

Mark: 110 cum laude/110 · Aeronautical Engineering

During my Aeronautical Engineering studies at the University of Pisa I gained a good knowledge of all the main engineering and aeronautical fields of studies, such as structures, aerodynamics, flight mechanics, systems, machine design, manufacturing etc.
https://www.unipi.it

Sant'Anna School — Supplementary Academic Education

Oct 2012 - December 2018 — *Scholarship won on the basis of a public national selection* · Industrial Engineering

I was selected to be an *Allievo Ordinario*, through a rigorous public examination (about 5% admission rate), providing a full government-funded scholarship. In exchange, I had to hold the highest standards in my University of Pisa studies, as well as taking several advanced extra exams.
· *First Level Diploma - June 2016 - Mark: 100 cum laude/100*
· *Second Level Diploma - December 2018 - Mark: 100 cum laude/100*
https://www.santannapisa.it

University of Pisa — Bachelor Degree

2012 - 2015 — *Mark: 110 cum laude/110* · Aerospace Engineering.

In my Aerospace Engineering studies at the University of Pisa I gained a good knowledge of all the theoretical bases of engineering, such as physics, mathematics, chemistry etc., as well as the basic aerospace engineering knowledge.
https://www.unipi.it

Liceo Leopardi of Recanati — High School Diploma

2007 - 2012 — *Mark: 100/100* · Scientific High School Diploma, Experimental Curriculum

The Experimental Curriculum of a Scientific High School consists in an increased amount of weekly lesson hours finalized to provide students with a more solid knowledge of physics.

INFORMATICS SKILLS

Basic	Nastran, Patran, C language
Intermediate	Catia, Ansoft Maxwell, IDL language, Labview, Python language, LateX
Advanced	Microsoft Office, Google G Suite, Solidworks, Matlab, Simulink, Fluent, ICEM, Ansys Mechanical

LANGUAGES

ITALIAN · Mothertongue

FRENCH · Advanced

ENGLISH · Advanced · *Cambridge English: First (FCE)*

AWARDS

Marisa Bellisario Fundation — XXXI Marisa Bellisario Award

June 2019 — *Mela d'Oro Award* · Engineering Fresh Graduate Woman

The *Mela d'Oro* Award is assigned by the Marisa Bellisario Fundation in recognition of the women value in several fields. I was awarded with this prize as a promising woman graduate in engineering. http://www.fondazionebellisario.org

COMMUNICATION & MEDIA EXPERIENCE

Airbus Article Contributor — GEESE PROJECT ARTICLE ON AIRBUS WEBSITE

27 September 2024

I was interviewed in the context of an article talking about the "Wake Energy Retrieval" principle and the GEESE SESAR3 project. The article was published on the Airbus Website and also on several other aviation websites.
https://www.airbus.com/en/newsroom/stories/2024-09-airbus-and-sesar-partners-are-taking-wake-energy-retrieval-to-the-next

Video speaker — ATC NETWORK - GEESE PROJECT VIDEO

10 Avril 2024

I contributed to a video created and diffused by ATC Network, in which I give some details about the GEESE project and the so-called "Wake Energy Retrieval" principle.
https://www.atc-network.com/atc-videos/sesar-joint-undertaking/geese-wake-energy-retrieval-project

TV documentary contributor — LE RÊVE DE LÉONARD LES SECRETS DU VOL DANS LA NATURE

04 Avril 2024

I contributed to a documentary talking about the flight technique, created and diffused by France TV for their documentary series "Science grand format".
https://www.francetvpro.fr/contenu-de-presse/65662278

Panel Guest — AIRBUS SUMMIT 2021

22 September 2021

I participated at the Airbus Summit 2021 - day 2 - as one of the participants in the "Preparing for tomorrow" panel discussion, together with Thierry Baril, Jumoke Fagbemi and others.
https://www.airbus.com/en/newsroom/events/airbus-summit-2021/airbus-summit-2021-preparing-for-tomorrow

On Press — PRESS MENTIONS

November 2022

L'usine Nouvelle - "Airbus leve le voile sur son aile capable de s'adapter aux conditions meteo"
https://www.usinenouvelle.com/article/en-images-airbus-leve-le-voile-sur-son-aile-capable-de-s-adapter-aux-conditions-meteo.N2069337.

November 2022

WirtschaftWoche 48 - "Die Befluglerin"
https://www.wiwo.de/my/unternehmen/dienstleister/sabine-klauke-das-ist-die-frau-die-der-klimarevolution-bei-airbus-fluegel-verleihen-soll/28828576.html

December 2022 — Les Echos - "Avion du futur : ces ailes revolutionnaires que prepare Airbus" https://www.lesechos.fr/industrie-services/air-defense/avion-du-futur-ces-ailes-revolutionnaires-que-prepare-airbus-1892602

Teaching Experience

University External Lecturer

Academic Year 2019-2020 — ISAE-SUPAERO Toulouse - Loads and Aeroelastics External Lecturer for Aeronautical Engineering Master students.

Academic Years 2021-2023 — IMT Mines Albi - Aircraft Loads and Aeroelastics External Lecturer for Transportation Industry Materials and Advanced Processes Engineering students.

October 5, 2024