

# Tristan MAITRE

🌐 tristan-maitre.netlify.app  
📅 11 September 1991  
🇨🇭 Swiss  
✉ tristan.maitre@bluewin.ch  
☎ +41 79 515 67 05  
💬 live:tristan.maitre\_1  
🌐 linkedin.com/in/tristanmaitre

## SYSTEMS ENGINEER

Specialization - Aerospace & Complex Systems



Driven by my curiosity and attention to detail, I am a **problem-solver** and **questions-asker**, good at thinking in systems, communicating ideas, and adapting to change.

Holding a MSc in Aerospace Engineering and a BSc in Aviation, I have proven experience in the application of advanced methods in the fields of **product quality & planning**, **requirement engineering**, **system design**, **testing**, and **certification**.

My ambition is to **enable sustainable solutions to real-world problems**, with a special focus on the integration of new mobility technologies in society.

### EXPERIENCE

● 11/2018 - 06/2020

**APSYS Product Assurance & Safety Aerospace** 📍 Toulouse, France  
**System Designer - Airbus Surveillance (ATA34) Design Office**

Product development for more integrated & automated cockpit functions

- Perform technical analysis on requirements, constraints and business case
- Specify and model future systems for traffic, terrain & weather avoidance
- Liaise with flight operations, test, and suppliers to launch industrial phase

**V&V Focal Point - A/C Condition & Monitoring (ATA31) Design Office**

Coordinate acceptance testing activities for Aircraft Data Collection function

- Implement a test strategy for each new embedded software standard
- Establish procedures for test bench, simulator and flight test
- Follow-up of suppliers for system delivery to the defined requirements

● 04/2018 - 10/2018

📖 *MSc in  
Aerospace Eng.*

**AIRBUS Operations SAS - Flight & Integration Tests** 📍 Toulouse, France  
**Master Thesis - Avionics / Flight Management Testing**

Assess the feasibility of Virtual Testing as a new test mean under DO-331

- Conduct feasibility study on integrating FMS software on virtual platforms
- Perform functional and back-to-back tests to assess representativeness
- Make recommendations to pursue virtual testing for system integration

● 09/2015 - 07/2016

📖 *BSc in  
Aviation*

**Skyguide - Swiss Air Navigation Services Ltd.** 📍 Geneva, Switzerland  
**Internship - Innovation & Change Management (ICM)**

Support Head of ICM in defining new processes & methods at PMO level

- Develop a Company Roadmap to align functional and company strategies
- Propose a structure for the external funding in innovative projects
- Submit an White Paper on innovation in the Air Traffic Management area

● 01/2012 - 09/2012

**RUAG Aviation Subsystems & Products** 📍 Interlaken, Switzerland  
**Internship - Sales and Marketing**

Support product owners in producing factsheets, invoices, contracts and certification papers for MRO services and aviation sub-systems.

### TECH SKILLS



MATLAB-Simulink  
UML, SysML



Python / Java  
C / C++



3DX CATIA  
Solidworks



Safety analysis  
Certification  
(ARP & RTCA Standards)



Technical Writing  
DOORS



Product  
Development

### SOFT SKILLS



Solution-oriented  
System thinker



Flexible &  
Open-minded



Proactive  
Team Player

### LANGUAGE SKILLS

FRENCH

NATIVE SPEAKER

ENGLISH

FLUENT (C1+)

GERMAN

PROFICIENT (B2)

## EDUCATION

Tristan MAITRE - Systems Engineer - CV

08/2016 - 10/2018

**Institut Supérieur de l'Aéronautique et de l'Espace**  Toulouse, France  
**Master of Science in Aerospace Engineering**  
**Track** Aerospace Systems - **Major** Systems Engineering

04/2018 - 10/2018


**Master Thesis**  
**Airbus Operations SAS | Flight Management System Test Lab**  
**FMS Virtual Testing Demonstrator**  
Assess the feasibility of Virtual Testing under DO-331 (see Experience section)

01/2017 - 04/2018

**Research Project**  
**ISAE-Supaero | Department of Complex Systems Engineering**  
**Model-Based Approach for Safety Analysis of Human-Machine Interactions**  
Develop a Model Based System Engineering methodology to assess the overall reliability of an aircraft system implying the human-in-the-loop, extending ARP4761  

- Identify unsafe control actions in aircraft procedures (STPA, STAMP)
- Model pilot tasks in nominal and abnormal situations (Petri Nets, Event-B)
- Analyse human errors in task models as a tool for system architecture trade-off.

09/2012 - 07/2015

**Zurich University of Applied Sciences (ZHAW)**  Winterthur, Switzerland  
**Bachelor of Science in Aviation**  
**Major** Technical Management & Engineering

01/2015 - 07/2015

**Bachelor Thesis**  
**Center for Aviation (ZHAW) & Meteomatics GmbH**  
**Preliminary Study on a Passive Rescue System for UAVs**  
Assume the technical lead to develop a safe, robust and maintenance-free rescue system for drones: from concept to flight testing  
(Flight dynamic analysis, Project Mgmt, MATLAB Simulink, CATIAV5, Arduino)

09/2014 - 12/2014

**Project Thesis**  
**Center for Aviation (ZHAW) & SilentFlight DESiE e.V.**  
**Design of Control Surfaces for a Light Aircraft in Canard Configuration**  
Conduct feasibility study to investigate roll authority & lateral-directional behaviour  
(Aerodynamic & Flight dynamic Analysis: MATLAB - Simulink, AVL)

09/2014

**Flight Test Lab (Nordholz, DE)**  
**Center for Aviation (ZHAW) - FH Aachen**  
**Lateral & directional stability of light aircraft**  
Assess the stability of a Piper PA28 with flight tests  
(MATLAB - Simulink)

09/2013 - 02/2014

**Transport Engineering Project**  
**Institute of Data Analysis (ZHAW) & Swiss International Air Lines**  
**Study on optimum flight speed in case of slot delays**  
Demonstrate the fuel savings potential of reducing the cruise speed and thus avoiding holding patterns at destination.  
(MATLAB, Java)

## ACHIEVEMENTS & CERTIFICATES



**EASA Flight Crew Licence**  
Private Pilot Licence (A) (2018)  
Single-engine piston class rating



**Cambridge English Language Assessment (2015)**  
Certificate Cambridge Advanced English (CAE)  
Level C1

## INTEREST & HOBBIES



Flying (EASA PPL SEP)



Mountain Biking



Hiking



Digital Making



Cognitive Sciences



Architecture & Design

## REFERENCES

Contact & further references  
available upon request

**David CARLU**

Senior Surveillance System Designer | AIRBUS Operations SAS - Toulouse, FR

**Raphaël MICHEL**

Head of Operations Architecture & Portfolio Management | Skyguide - Geneva, CH

**Moussa SFEIR**

FMS Test Engineer - Avionics Testing | AIRBUS Operations SAS - Toulouse, FR