Tristan MAITRE

mtristanmaitre.pro

11 September 1991

Swiss

@ +41 79 515 67 05

S live:tristan.maitre_1

in linkedin.com/in/tristanmaitre

SYSTEMS ENGINEER

Specialization - Aerospace & Complex Systems



Driven by my curiosity and critical thinking, I am a problem-solver and questionsasker, 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 management, requirements engineering, system design, testing, and certification.

My ambition is to enable sustainable solutions to real-world problems, with a special focus on human-system integration & performance in safety-critical domains.

EXPERIENCE

11/2018 - 06/2020

APSYS Product Assurance & Safety Aerospace O 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

6 09/2015 - 07/2016

Skyguide - Swiss Air Navigation Services Ltd. O 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

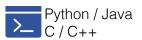
- Propose a structure for the external funding in innovative projects
- Submit an White Paper on innovation in the Air Traffic Management area

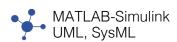
BSc in Aviation 01/2012 - 09/2012

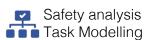
RUAG Aviation Subsystems & Products O Interlaken, Switzerland Internship - Sales and Marketing

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

TECH SKILLS













SOFT SKILLS



Solution-oriented system thinker





LANGUAGE SKILLS

FRENCH

NATIVE SPEAKER

ENGLISH

FLUENT (C1+ - CAE Certified)

GERMAN

PROFICIENT (B2)

EDUCATION 08/2016 - 10/2018 Institut Supérieur de l'Aéronautique et de l'Espace ① Toulouse, France Master of Science in Aerospace Engineering **Track** Aerospace Systems - **Major** Systems Engineering 04/2018 - 10/2018 Master Thesis Airbus Operations SAS I 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 I 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 human controller tasks in nominal/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 **Bachelor Thesis** 01/2015 - 07/2015 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) **CERTIFICATES** CS50x - Harvard University (2020) ATSEP Basic Training • Skyguide (2016) Air Traffic Safety Electronics Personnels training designed to impart fundamental Introduction to the intellectual enterprises of computer science and knowledge of the CNS-ATM environment the art of programming EASA Flight Crew Licence (2018) Agile Fundamentals (2020) Private Pilot Licence (A) Including Scrum and Kanbán Single-engine piston classrating The BA Ğuide Online course on Udemy **INTEREST & HOBBIES** Mountain Biking Flying (EASA PPL SEP) Cognitive Sciences Digital Making Architecture & Design

REFERENCES

Contact & further references available upon request

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

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

Aicraft Condition & Monitoring System Architect | AIRBUS Operations SAS - Hamburg, DE