Tristan MAITRE

SYSTEMS ENGINEER

Specialization - Aerospace & Complex Systems



11 September 1991

- Swiss

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Driven by my curiosity and attention to detail, 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 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 DO331

- 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. © 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

BSc in

Aviation

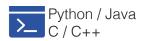
RUAG Aviation Subsystems & Products O Interlaken, Switzerland Internship - Sales and Marketing

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

TECH SKILLS



MATLAB-Simulink UML, SysML







Safety analysis Certification (ARP & RTCA Standards)

Technical Writing DOORS



SOFT SKILLS



Solution-oriented System thinker





LANGUAGE SKILLS

FRENCH

NATIVE SPEAKER

ENGLISH

FLUENT (C1+)

GERMAN

PROFICIENT (B2)

08/2016 - 09/2018 Institut Supérieur de l'Aéronautique et de l'Espace ① Toulouse, France Master of Science in Aerospace Engineering **Track** Aerospace Systems - **Major** Systems Engineering 04/2017 - 04/2018 Master Thesis Airbus Operations SAS I Flight Management System Test Lab **FMS Virtual Testing Demonstrator** Assess the feasibility of Virtual Testing (more in experience section / page 1) • 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 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. Zurich University of Applied Sciences (ZHAW) • Winterthur, Switzerland 09/2012 - 07/2015 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 (Élight dynamic analysis, Project Mgmt, CAD: 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) **INTEREST & HOBBIES** Flying (EASA PPL SEP) 6 Mountain Biking Digital Making Cognitive Sciences Architecture & Design **ACHIEVEMENTS &** CERTIFICATES Cambridge English Language Assessment (2015) EASA Flight Crew Licence Private Pilot Licence (A) (2018) Certificate Cambridge Advanced English (CAE) Single-engine piston classrating Level C1

REFERENCES

EDUCATION

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