



ENZO VANESSCHE

SYSTEMS ENGINEER | SYSTEMS ARCHITECT

✈ AEROSPACE & DEFENCE 💻 IT 🏦 BANKING + MEDICAL

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Driving License: B

Swiss Work Permit: B
Nationality: French

👤 PROFILE

Certified systems engineer & systems architect with expertise in coordinating complex system development throughout entire lifecycle (concept, architecture, design, integration, verification & validation, support). Proficient at collaborating within multidisciplinary and highly regulated environments.

📁 WORK EXPERIENCE

2023 – Now

skyguide

Zurich, Switzerland
(1 year contract – Remote)

SYSTEMS & SOLUTION ARCHITECT – (Aviation / IT)

- Lead solution architecture and complete technical specification:
- Application architecture & interfaces (REST + SOAP APIs) to systems and databases (Polarion, AWS, Azure, MS SQL, TIBCO, FME, Jira, Salesforce).
- Data architecture definition: data flows + data structure (JSON, AIXM using UML).
- Security policies definition (encryption - TLS, input validation, defense in depth, sec. zoning).
- Automation processes/workflows specification, for collecting Aeronautical data using BPMN.

2022 – 2024

WORLDLINE

Biel, Switzerland

SENIOR SYSTEMS/ REQUIREMENTS ENGINEER (Banking / IT)

- Manage the engineering of Worldline's proprietary PCI compliant payment protocol (XML based) that enables 10+ billions payment transactions per year.
- Coordinated the development of payment protocol converter deployed on 50K+ terminals:
 - Technical requirement specification for SW development (for JAVA, C, Swift).
- Authored SysML/ UML company modelling guides to comply with OMG modelling standards.

2021 – 2022

MEGGITT

Fribourg,
Switzerland

SYSTEMS ENGINEER – Project Lead (Military Aerospace)

- Co-ordinated embedded system development (Engine Monitoring system, \$1M+) throughout the V-model using ARP-4754 between: Client, HW, SW, safety, testing & manufacturing. Led:
- System architecture, allocation of functions to subsystems, requirement management, full specification, validation strategy, environment testing according to DO-160.
- Interface definition (ARINC-429, MIL-STD-1553), up to bit level.
- Safety activities (ITAR): PSSA (FTA), FMEA in accordance to ARP4761 and DO-178B DAL A.

03 – 08 2021

PILATUS

Stans, Switzerland
Consulting contract

SYSTEMS & TEST ENGINEER (Military Aerospace)

- Co-ordinated acquisition and support work-packages of military aerospace training systems (in line with ISO/IEC 15288). Managed system configuration and supported integration.
- Provided quality assurance in line with ISO 9100 and 9001.
- Test management: created test cases, performed FAT and SAT (at military bases).

2018 – 2021

SYSTEMS ENGINEER – Architecture (Military Aerospace)

BAE SYSTEMS

Warton, UK

- Led architectural development of the Future Combat Air System (FCAS) service-oriented architecture (SOA) as part of a multi-disciplinary team (30 people) using scrum.
- Specified 80+ SW component interfaces and internal views, generated architecture principles (incl. cross-cutting concepts – safety & security), created viewpoints and templates.
- Led use case analysis and SysML/UML diagram design using MBSE, decomposing stakeholder requirements into system requirements. Managed requirements traceability.

EDUCATION

2018 – 2020

Post Graduate Diploma – Engineering Business Manager (Part time)

Cranfield University,
UK

[60 ECTS credits, Grade A] Engineering Management: cost, project, programme and operations.

2013 – 2018

Master in Aeronautical Engineering – MEng (1st Class Honours)













Loughborough
University, UK

[300 ECTS credits, Grade A] Aerodynamics, CFD, structures, signals, thermodynamics, CAD.




CERTIFICATIONS

- **INCOSE – CSEP + ASEP** (Systems Engineering)
- **IREB – CPRE** (Requirements Engineering)
- **OMG – OCEB2:** (Business Process Management)
- **OMG – OCSMP MU** (SysML / MBSE)
- **ISAOB – CPSA** (Software Architecture)
- **ISTQB – CT FL** (Testing)
- **ENGINEERS EUROPE – EUR ING**
- **TOGAF 10** (Enterprise Architecture)
- **TOGAF 10** (Business Architecture)
- **ArchiMate 3**
- **(ISC)² – CC** (Cybersecurity)
- **Scrum.org – PSM I** (Scrum Master)
- **Scrum.org – PSPO I** (Product Owner)
- **EngC UK – CEng** (Chartered Engineer)

IT

 MATLAB + Simulink	 UML + SysML + BPMN	 C++, Python, Java, XML
 PTC Integrity Modeller	 ArchiMate / Archi	 PlantUML
 Visual Studio	 DOORS	 Siemens NX (CAD)
 Office Pack: MS Word, Excel, Visio, PowerPoint, Project & Outlook.	 JIRA / Confluence	 GitHub / GitLab

ADDITIONAL INFORMATION

- **Professional Memberships:** Member of **INCOSE** (International Council of Systems Engineering), **RAeS** (Royal Aeronautical Society – UK), **SSSE** (Swiss Society of Systems Engineering) and **(ISC)²** (cybersecurity).
- **Languages:**  **English:** fluent  **French:** native  **German:** beginner, actively learning
- **LinkedIn:** www.linkedin.com/in/enzo-vanessche/
- **Consulting:** www.vanessche-consulting.ch