

Resume

René Weisbuch – Embedded Software Engineer



Personal Data

Name: WEISBUCH René

Consultant in micro-business: ALP'AZUR Solutions:

https://gribouillage.github.io/AAS_SEA/AAS_SEA_En

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Date and place of birth: Februar 13. 1971 (55 years old) in Grenoble (France)

Family status: Unmarried, no children

Nationality: French

Educational Background

Lycée : Baccalauréat (Science) 1989 in Digne-les-Bains

Ecole préparatoire : 1989-1992 in Lycée Poincaré in Nancy

Ecole d'ingénieur : 1992-1995 ENSICA in Toulouse

Degree : Aeronautical Engineer (Ecole Nationale Supérieure d'Ingénieurs en Construction Aéronautique)

Professional Experience

Domain:

- **Products:** Missile Guidance systems, Ground surveillance radars, airborne radars, Cabin pressure regulator for aircraft
- Programation languages: C, C++, Ada, Python
- **SW Tools:** MATLAB, MATLAB Simulink, Google Test, DOORS, Pytest, Cantata
- **Configuration management:** Git, Tortoise SVN, PVCS
- Operating systems: VxWorks, Linux
- **Tasks:** Integration, Unit tests, Development, Algorithm modelisation, Data reduction and automation

Expertise:

- Real time SW integration on dedicated HW
- Algorithm test and integration (Signal Processing...)
- Radar algorithms (Airborne, Air surveillance,...)
- Systems skills (Radar signal processing, regulator,...)

Creation of micro-business ALP'AZUR Solutions the January 8. 2026:

- The company provides industrial IT service with relation to aeronautics
- Main strength in integration and test of logiciels critiques

Hensoldt Sensors GmbH (Ulm): Dec. 1. 2022 – Aug. 31. 2025)

Subject	ECRS Mk1 (Evolution of the Radar oft he Eurofighter) Radar Environment simulator
Fonction	Software Ingeneer
Activities	Implementation of the radar simulation software in ADA. Implementation and tests oft he simulator Algorithms. Development and execution of the algorithms component tests.
Technical environement	Programmed in ADA language, Tools and model implemented in Python. Developement environamnt: Linux Red Hat, DOORS, Virtual machine, Pytest

Hensoldt Sensors GmbH (Ulm): (Apr. 1. 2019 – Nov. 30. 2022)

Subject	ECRS Mk1 (Evolution for the Radar oft he Eurofighter) Signal processing
Fonction	Software and system ingeneer
Activities	Flight data analysis and development oft he related tools. Analysis of the Radar Signal Processing algorithms (Air-Air mode) . SW improvement and evolution (from the latest version) Algorithm tests (Module and integration tests) Reference model development in MATLAB SW integration on target.
Technical environement	Language C (Use of GEDAE Tool to generate a graphical model), MATLAB (called by the C test SW), Developement environment: Linux Red Hat

Hensoldt Sensors GmbH (Ulm): (Apr. 1. 2018 – Mar. 3. 2019)

Subject	COBRA RES Offline Simulator
Fonction	Software Engineer
Activities	Definition and execution of validation tests for a scenario generator SW (Radar environment simulator) SW integration with the real-time simulator. Development of tools for data reduction.
Technical environment	SW coded in MATLAB, DOORS, C, Excel Macros

Continental (Ulm): (Apr. 1. 2016 – Mar. 31. 2018)

Subject	ADAS embedded camera in vehicles
Fonction	Software Engineer
Activities	Unit Test Tool dispatching (Google Test) Unit tests execution Evolutions implementation in the embedded SW
Technical environment	Code Composer, C, C++, Eclipse, Cantata, IMS, Google Test

Cassidian (Ulm – now: Hensoldt): (Jan. 1. 2015 – Mar. 31. 2016)

Subject	COBRA RES: Environment simulator for a counter-battery radar
Fonction	Software Engineer
Activities	Generation of a SWIG Dll for the test of C++ Modules from MATLAB. Unit tests: Check matching target Software with MATLAB model. Development in MATLAB of data reduction Tools. Support for integration on target.
Technical environment	Matlab, C, C++, TortoiseSVN, Visual Studio

Cassidian (Ulm – now: Hensoldt): (Jul. 1. 2013 – Jan. 31. 2014)

Subject	ASR-Canada: Air surveillance Radar
Fonction	Software and System Engineer
Activities	Research: Détermination of the target elevation with a multi-beam radar. Signal processing with a big number of filters Validation of the WMP (Windmill Mitigator Processor) and development of the reference model. Integration tests. Unit tests development and execution Reworking of Matlab simulator model.
Technical environment	Matlab, C, C++, TortoiseSVN, Python

Cassidian (Ulm – now: Hensoldt): (July. 1. 2012 – June. 6. 2013)

Subject	E-Captor: Eurofighter Radar: Partitioning
Fonction	Software Engineer
Activities	Design document redaction for partitioning of the Radar Software Partitioning development Integration on target

Technical environment	C, C++, VxWorks, PPC 603e (MPC 8270, 8641D)
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Diehl Aerospace (Überlingen): (Oct. 1. 2011 – June. 30. 2012)

Subject	Research project for a embedded SW Operating system: MONIK
Fonction	Software and system Engineer
Activities	Simualtion with MATLAB/Simulink of a cabin pressure regulator. Study and evolution oft he regulation loop. Generation oft he SW with Simulink. Integration oft he SW on the OS and the target.
Technical environment	CAN Bus, Matlab, Simulink, C, Python

Airbus Defense & Security (Ulm – now: Hensoldt): (Dec. 1. 2008 – Dec. 31. 2009)

Subject	Radar of the transport aircraft A400M: MMRP
Fonction	Software Engineer
Activities	Software review Software evolution and optimisation Integration tests with the MATLAB reference model
Technical environment	TI C6713, BIOS, Matlab, C, Asm

SAFRAN Paris/Argenteuil: (Nov. 1. 2007 – Nov. 30. 2008)

Subject	Navigation processor oft he transport aircraft A400M: GADIRS
Fonction	Software Engineer
Activities	Performance evaluation of the SW on target. (Benchmark) SW integration on target Real-time Operating System configuration. (Developed byS SAFRAN) Configuration management
Technical environment	C, PPC 603e (MPC 8270, 8641D),, SYNERGY CM 6.4 (Build Manager)

SAFRAN Paris/Argenteuil: (Aug. 1. 2003 – Oct. 30. 2007)

Subject	Embedded Software for the guided munition: AASM
Fonction	Software Engineer
Activities	Software development regarding existing SW specifications. Unit test implementation. SW integration on target Validation team support Debugging and SW correction

Technical environment C, FSR/FSX and RS422 Serial Links, MilBUS 1553, BIOS, TI C6711

MBDA Bourges: (Mar. 1. 2003 – July. 31. 2003)

Subject **Embedded Software of the cruise missile: ASMP-A**
Fonction Software Engineer
Activities Software developement regarding the existing specifications
Software integration on target
Validation tests
Debugging and SW correction

Technical environment C, PVCS

MBDA Paris/Meudon la forêt: (Mar. 1. 2000 – Dec. 31. 2002)

Subject **Embedded Software of a cruise-missile: Scalp-EG/Storm Shadow**
Fonction Software Engineer
Activities Software developement regarding the existing specifications
Software integration on target
Validation tests
Debugging and SW correction

Technical environment FSR/FSX and RS422 Serial Links, C, Ada, Adascope, Logical Analyzer, PVCS

Expertise

Aeronautical systems and/or embedded: Radar, Missiles, Vehicles

Software developement

Real-time environment, Integration on Hardware

Software tests

Tools implementation: Automation and data reduction

Summary of technical skills

Catégorie	Competences
Programming languages	Ada, Asm, C, C++, Python
Database Engines	Workbench
Operating systems	ARTK (C30), BIOS, home made multi-tasks kernel, TI BIOS, Windows, VxWorks, Linux
Microsoft Windows	Bis Windows 10

Platforms	Embedded Systems, PowerPC
Development environment	Code Composer, Eclipse, ICE2, Lauterbach Emulator für MC68020, MPC565, MPC5554, SYNERGY CM 6.4 (Build Manager), Tartan, Visual Studio, Windriver Workbench
Tools	Adascope
Configuration management	CVS, PVCS, TortoiseSVN, Git
Specification tool	DOORS
Test tools	ADS2/TPM, Cantata, Google Test, Pytest
Code generation, Build and Integration	CodeComposer, Gnatstudio, Visual Studio
HW Developement	Trace 32
Model developement tools	Esterel SCADE Suite, Matlab, Simulink, Python numpy, GEDAE
Data Bus	FSR/FSX and RS422 Serial Links
Project management tools	ethernet AFDX, CAN, Mil-STD-1553B, MiniBUS
Applications Desktop	IMS, SAP, JIRA
Hardware	MS Office
Debugger	Digital Wave Analyzer, FLASH memory, FPGA, Home made boards, Logical Analyzer, PPC 603e (MPC 8270, 8641D),, TI C30, TI C6711, TI C6713
Developement model	Blackhawk, Lauterbach, Gnatstudio
Other	V-Modell
Languages	FRAM, SRAM
Norms and Standards	French, English, German DO-178B

Languages

French : Mother tongue

English : Good level, written/spoken

German : Spoken: Very good level, Written: good level

Driving licence

Class B

Other interests

Languages, Cinema, Music, Retro-programming, Truffle crop