

About

- Seasoned software engineer with 15+ years of experience in the automotive sector
- Focus on embedded software development and integration
- Expertise in AUTOSAR and diagnostic protocols
- Thrive on leading, mentoring and working with multicultural teams in complex and challenging projects
- Strong communication skills in German, English, French and Italian

Employment

Expert	Elektrobit (Germany)	2012 –
Develop software for automotive electronic control units based on the AUTOSAR standard		
Software Engineer	Magneti Marelli / Da Vinci Engineering (Germany)	2009 – 2012
Developed software for automotive instrument clusters based on double microcontroller architecture		
Software Engineer	Dune (Italy)	2001 – 2009
Implemented algorithms on digital signal processors (DSP) for signal processing applications		

Education

Rome (Italy)	Sapienza University	1993 – 1999
<ul style="list-style-type: none"> · <i>Laurea cum Laude</i> in Electronic Engineering (July 1999) · Faculty of Electronic Engineering and InfoCom Department 		

Technical Experience

- **Diagnostic expert group** (2022): Lead the diagnostic expert group in providing solutions to diagnostic related issues
- **AUDI High Computing Performance ECU** (2020 – 2022): Provide AUTOSAR support for diagnostic and boot-loader topics
- **BMW Medium and Front Range Radars** (2017 – 2019): Integrated AUTOSAR basic software modules and communication stacks (Ethernet, CAN)
- **VW Generic Bootloader** (2012 – 2015): Developed and maintained the VW flash bootloader
- **Porsche Instrument Cluster** (2009 – 2012): Implemented end of line routines for driving HW components
- **Wide Open/Super Het receivers** (2008 – 2009): Designed the control SW in C++ running under the Wind River VxWorks real-time operating system
- **Voice/Data Crypto device** (2004 – 2009): Developed in assembler the generation of digital (300, 600, 1200, 2400 bps) and analog (DQPSK modulation) waveforms running on a fixed-point DSP
- **EU Project** (2001 – 2003): Evaluated signal processing algorithms for UMTS terminals in MATLAB

Additional Experience

- **Patent Examiner** (2016 – 2017) at the European Patent Office (EPO) in The Hague (The Netherlands)
- **Reviewer** (2002) for the IEEE Potentials magazine

Computer Languages and Technologies

- Embedded C (proficient); Python, C++, MATLAB, Assembler (prior experiences)
- EB tresos Studio, Vector CANoe; Automotive Ethernet, Wireshark
- ISO diagnostic protocols 14229 (UDS) and 13400 (DOIP)
- Lauterbach TRACE32 and Green Hills MULTI debuggers; SVN, Git; Jenkins; \LaTeX , MS Office

Portfolio

- **Python code snippets** <https://www.mathsophy.com/python-codesnippets>
- **Binary search trees** <https://www.mathsophy.com/post/binary-search-trees-and-avl-trees>