

Daniele Aimo*Senior Embedded Engineer, Software Engineer, Team Leader***Aug, 2022 to present - Senior Embedded Engineer at Arduino**

- Activity:**
- design, implementation and debug of Embedded Firmware running on various new Arduino boards
 - maintenance of older Arduino boards FW

Results: successfully released on the market many products based upon firmware I (entirely or in large part) developed (for example Uno R4, Portenta C33, Opta Analog, Opta Digital, Science Kit)

Aug, 2021 to Aug, 2022 Energy Validation Manager at Bitron

Activity: management of the Energy Validation team

- Results:**
- recruited and trained the very first Energy Validation team
 - laid the foundations of validation group in term of tools and processes
 - contributed to the overall development process according to IEC-62443

Oct, 2012 to Aug, 2021 Senior Software / Firmware Engineer at Panini

- Activity:**
- embedded software development on bare metal devices and operating system (Linux, RTOS) driven devices
 - development of applications and libraries on Windows and Linux OS
 - development of complex algorithms (OCR) using Artificial Intelligence and Deep Learning

- Results:**
- successfully released on the market various devices based on my code
 - successfully released on the market various software products widely used by various financial organizations

Nov, 2010 to Oct, 2012 Software Team Leader at Magneti Marelli

- Activity:**
- software development team management
 - project management
 - design and development of embedded software for a vehicular ECU
 - code reviews, code integration, releases of software versions and bug fixing management

Results: successfully recovered the project left in very bad shape and smoothly released the product on the vehicle (launched on the market)

Feb, 2009 to Nov, 2010 Firmware Engineer at Bitron

- Activity:**
- definition of the Firmware architecture for Energy Meter
 - low level drivers and modules development with C language on bare metal and application development using Free RTOS

Results: my code and architecture reused on many different products and still used 11 years after I left the company

Jun, 2006 to Feb, 2009 Validation Engineer at Bitron

- Activity:**
- Software Requirement Specifications analysis
 - Software Test Plans (functional, integration and unit tests) definition
 - Design and development of an Automatic Test Bench
 - Management of the verification process and related tools and resources

Results: Reduced the validation time (for each release) from 4 persons for 3 months to 1 person for 10 days using Automatic Test. *Dramatically increased the Test Coverage* (no bugs discovered by customers).

Oct, 2003 to Aug, 2021 System Engineer at Iveco (Eltrac)

- Activity:**
- Software Requirement Specification definition for a vehicular ECU
 - Testing of the ECU at the bench and on the vehicles
 - parameter setting tuning and related dataset definition and management

Results: Successfully released FW and production datasets for Irisbus vehicles

Oct, 2001 to Oct, 2003 Avionic Engineer at Alenia Aeronautica**Education**

- 2017 Artificial Intelligence Nanodegree Program at Udacity
- 2001 **Master's degree Electronic Engineering** at Polytechnic of Turin

Knowledge**Languages**

- Italian (mother tongue)
- English (proficient user)
- French (proficient user)

Management

- Project management
- Team management

Software Languages

- C, C++
- Python
- Lua
- Javascript
- HTML, CSS

Software Development

- Firmware development
- Embedded SW both on bare-metal and OS driven products
- Linux tool-chain
- Windows tool-chain
- Multi-thread
- Real-time

Cyber-security

- IEC-62443 regulation

Artificial Intelligence

- Machine learning, deep learning
- Neural Networks
- TensorFlow

Software management

- git
- SVN
- Confluence
- JIRA

Protocols

- MCU peripherals
 - UART
 - SPI
 - I2C
 - [...]
- USB
- TCP/IP, UDP/IP
- MQTT
- CAN.LIN, ModBus
- IEC-60870