

Marco Geremia

Firmware Engineer

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PROFILE AND SOFT SKILLS

I am a precise person, motivated and easily engaged in new projects, ideas and technologies. Hard working and meticulous, great gregarious in a team context. Ready to discuss my decisions and the ones made by those around me. Capable of retrieving information by myself and diligent in learning and keeping up the pace. I have high consideration of my potential as a problem solver, and consider myself a genuine individual. I embrace humility and respect my limits and those of my colleagues.

EDUCATION

University of Padova

Bachelor of Science in Computer Engineering 2017-2020

- Thesis: Reverse engineering of CAN messages for terminal container movement machinery

Master of Science in Control Systems Engineering 2020-2022

- Thesis: Rigidity theory in presence of noise for localization and control of multi-agent systems

WORK EXPERIENCE

Euclidlabs SRL

Internship involving robot programming and computer vision Mar 2022 - Jun 2022

M31 SRL

Firmware Engineer Oct 2022 - Present

- Design, development and testing of system-level software on NXP ARM embedded linux platform using gRPC framework (Go, Python)
- Feature specification, integration and bug-fixing for third party clients of system-level legacy software on NXP ARM embedded linux platform (C)
- Firmware development, debugging and maintenance on Cortex-M architecture on STM32 platform (C)
- Build, testing and deployment automation (Python, Bash Make Scripts, Bitbucket pipelines)
- Hardware functional testing and report generation
- Development of 3D machine digital twin using g3n-engine (OpenGL)

HARD SKILLS

- Advance knowledge of the Go programming language
- Advance knowledge of the gRPC framework
- Advance knowledge of the C programming language
- Good knowledge of the Python programming language
- Good knowledge of microprocessors architecture and peripherals (UART, SPI, I2C, DMA, timers, interrupt, scheduling)
- Usage of STM32 Suite (CubeIDE, CubeProgrammer, CubeMX)
- Good knowledge of Linux OS usage and configuration
- Good knowledge of Rust programming language
- Basic knowledge of HTML and CSS
- Data manipulation (matplotlib, numpy, pandas) for hardware testing and report production (markdown, latex, word, excel)
- Discrete knowledge of computer vision methodologies (OpenCV)
- Discrete knowledge of Matlab and Simulink (prototyping and simulation)
- Make build system
- Git SVN