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CV no / ID:	45167
Main Expertise:	Firmware Developer
IT Experience since:	2019
Education degree:	Bachelor of Electronics Engineering
Other notes:	Available for Full-Time, could start working within 5 weeks

Summary

As a results-driven embedded software engineer, he is passionate about continuously improving his technical skills, and staying current with emerging technologies. Proficient in test-driven development methodologies to ensure code integrity and functionality. Eager to apply C/C++ skills to drive innovation in embedded systems at your organization.

Skills/Competencies:

Expert:	C/C++, ARM Cortex-M, RTOS (FreeRTOS, Zephyr OS), MCU peripherals and protocols (CAN, SPI, I2C, UART, USB, Ethernet, TCP/IP, UDP), Hardware debugging, IoT protocols (CoAP, MQTT, LwM2M), unit and integration testing, CI/CD, Docker, Jenkins, Embedded abd PC-based simulation development
Advanced:	LTE-M, GNSS, Soft. Architecture and driver development, Documentation and collaboration in international teams, Electrical schematics interpretation, Python, C#
High Competence:	Satellite flight software development, Assembler-level firmware for flow converter SoC, Agile development and sprint planning, BOM
Intermediate Knowledge:	STMicroelectronics toolchains, Nordic toolchains

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Project Experience:

Aug 2024 - Present

Embedded Software Engineer

n/a

- Working on a new project from concept to implementation, leveraging cellular (LTE-M) and GNSS technologies along with the RTOS to deliver an efficient and real-time embedded solution.
- Designing and developing embedded software applications, drivers, and hardware abstraction layers (HAL) in C/C++.
- Developing software build systems that utilize Docker for a reliable CI/CD process.
- Developing and testing firmware that implements IoT application-layer protocols such as CoAP, MQTT, and LwM2M. Implementing unit and integration tests to validate embedded software functionality, focusing on achieving high test coverage.
- Developing cross-platform software components to enable execution on both embedded devices and PC-based simulations.
- Collaborating with international colleagues to develop solutions, ensuring alignment with project requirements and working toward common goals.

Nov 2022 - Jul 2024

Embedded Software Engineer

n/a

- Development and maintenance of embedded flight software for small satellites. Developing new and maintaining current drivers for different devices and sensors in RTOS-based systems mostly in C/C++. A few bigger development features included IP networking (UDP/IP and TCP/IP). As the architecture included several subsystems with various devices and sensors, it was common to work with communication protocols such as CAN, SPI, I2C, UART, Ethernet, etc.
- Documenting firmware drivers and functionality. Solving and fixing in-orbit issues, bugs, and anomalies of the satellites.
- Writing unit and integration tests that go hand in hand with the CI/CD process. That includes writing Python scripts and working with Jenkins.
- Working based on agile principles: being part of a scrum team and doing tasks planned for a sprint with an estimated timeline.
- Participating in client support and software design meetings, and brainstorming sessions.

- Since the company is international, English is used for documentation writing and everyday communication.

Sep 2019 - Nov 2022

Embedded Engineer

n/a

- Embedded firmware development for water and heat meters. Took part in development of a new product line: adopting most of existing product software features and functionality while also adding new. That also included working on writing drivers and porting to a different MCU.
- Writing custom firmware in assembler for flow converter SoC to perform measurement processing which was previously executed in the MCU. Gathered quite a lot of experience developing firmware for devices that had time constraints and limited system resources.
- Built Windows Forms application in C# for flow converter SoC firmware testing.
- Preparing BOMs and assembly files of different product options for manufacturing processes.
- Participation in testing and calibration processes of water and heat meters as being responsible for software development of meter measurements.

Education:

2016 - 2020 — Kaunas University of Technology, Bachelor of Electronics Engineering

2004 - 2016 — Kaunas Jono Pauliaus II gymnasium, High School Diploma

Courses and Certifications:

2015 — Pearson Edexcel Level 2 Certificate in ESOL International

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Languages:

English	Professional working proficiency
Lithuanian	Native or bilingual proficiency