

Marcell Glaum

Firmware Engineer

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☎ (621) 950-4797

📍 Fargo, ND

Education

Bachelor of Science in Electrical Engineering at North Dakota State University, Fargo, ND

Sep 2016 - May 2020

Relevant Coursework: Calculus, Linear Algebra, Differential Equations, Physics, Electronics, Digital Logic, Computer Architecture, Electromagnetism, Signals and Systems.

Links

[linkedin.com/in/marcellglaum](https://www.linkedin.com/in/marcellglaum)

Skills

C programming

Embedded systems

Firmware development

Debugging and troubleshooting

Microcontroller architecture

RTOS (Real-Time Operating System)

PCB design and layout

Languages

English

Russian

Hobbies

Programming

Profile

I am an experienced Firmware Engineer with over 3 years of experience in firmware design, development and troubleshooting. I have a proven track record of developing and deploying high-quality firmware solutions that meet customer requirements. I have a strong understanding of embedded systems, microcontrollers, and associated software development tools. My key strengths include debugging and troubleshooting, customer-focused problem solving, and design and development of firmware architectures. I am adept at working with a variety of hardware, software, and communication protocols. I have a strong background in the development of industry-standard protocols and interfaces, and I am highly knowledgeable in the application of these protocols and interfaces to embedded systems. I am also highly skilled in system and performance optimization.

Employment History

Lead Firmware Engineer at Microsoft Corporation, ND

Oct 2022 - Present

- Developed a secure firmware platform for Microsoft devices, resulting in a 20% reduction in the time needed for device setup.
- Led the design and implementation of a new bootloader, optimizing the boot process by 50%.
- Created an automated test suite for firmware testing, increasing the efficiency and accuracy of the QA process by 30%.
- Re-architected the system firmware to enable support for new features, resulting in a 25% increase in system performance.

Senior Firmware Engineer at Johnson Controls Inc., ND

Jul 2020 - Sep 2022

- Developed and implemented a new firmware system for Johnson Controls Inc., ND that improved operational efficiency by 20%.
- Led a team of engineers in the design and development of a firmware update that reduced system response time by 15%.
- Reengineered existing firmware code to reduce system errors by 30%.
- Optimized firmwares to improve energy efficiency of Johnson Controls Inc., ND's equipment by 40%.

Certificates

Certified Firmware Engineer (CFE)

Sep 2021

Certified Embedded Systems Professional (CESP)

Jun 2020

Memberships

Institute of Electrical and Electronics Engineers (IEEE)

International Society of Automation (ISA)