

Gavin Guinn

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Dear Hiring Manager,

Re: Application for Embedded Systems Developer - CarbinX Technology at CleanO2

I am writing to express my interest in the Embedded Systems Developer position with CleanO2, specifically to contribute to the development of the CarbinX technology. With over three years of professional experience in firmware engineering and embedded systems, I am well-prepared to design and optimize embedded software for CarbinX's innovative CO2 capture systems. CleanO2's commitment to environmental sustainability through technological advancement aligns closely with my personal values, and I am eager to bring my technical expertise to this mission.

In my previous role as a firmware engineer, I gained extensive experience programming embedded controllers, creating drivers for critical protocols (UART, SPI, I2C), and performing hands-on debugging with digital logic analyzers and oscilloscopes. One of my responsibilities involved collaborating closely with hardware engineers to design circuits and troubleshoot faults on PCBAs, where I developed practical skills in schematic reading and hardware diagnostics. This experience in both firmware and hardware development has equipped me to effectively integrate embedded systems with complex hardware components like Siemens control boards, a key requirement for this role.

I am particularly drawn to CleanO2's emphasis on innovation and cross-functional collaboration. My background includes working in multidisciplinary teams to define, implement, and refine system functionalities that meet both technical and environmental performance goals. During a project involving IoT-enabled environmental sensors, I led the firmware development for data acquisition and control, ensuring that the system's performance was reliable and met industry standards. This required meticulous testing and documentation, skills I would bring to CleanO2 to ensure that CarbinX systems operate efficiently and reliably.

My commitment to problem-solving and continuous improvement is complemented by a strong foundation in embedded system architecture and the software development life cycle. I am confident that my technical background and hands-on approach to embedded systems development make me an excellent fit for this position at CleanO2.

Thank you for considering my application. I look forward to the opportunity to discuss how my background and skills align with CleanO2's goals.

Sincerely,

Gavin Guinn