**Gavin Guinn** 

221 6 Ave SE, Unit 403, Calgary, AB gavinguinn1@gmail.com (587) 889-9815

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Dear Talent Acquisition Team,

Re: Application for Embedded Engineer at ecobee

I am writing to express my interest in the Embedded Engineer position at ecobee. With over three years of professional experience as a firmware engineer, I am confident in my ability to contribute to the Embedded Chapter. In my previous role, my favorite projects involved working on crossfunctional teams, especially when tackling challenging debugging issues. I've spent many late evenings collaborating with electrical engineers, identifying and fixing faults in batches of PCBAs. This hands-on teamwork has been crucial to my growth as an embedded engineer. Coming from a background in computer science (BSc), I'm particularly grateful to my former colleagues for helping me develop practical EE skills, such as schematic reading and debugging with digital logic analyzers.

In university, two Computing Machinery courses ignited my passion for low-level programming and the C language, sparking my interest in how code executes on target hardware. Since then, I've written C programs for high-performance clusters, ARM microcontrollers running FreeRTOS, and Linux systems. While most of my firmware development has been in C, I've also used C++ professionally—particularly with GTest—to enhance software quality. When developing GUIs for IoT devices using C and LVGL, I noticed how the lack of object orientation sometimes led to avoidable bugs. This has fueled my interest in further developing my C++ skills, particularly for creating engaging and maintainable user interfaces.

As a resident of Calgary, AB, I'm encouraged that this position offers remote work. However, I also recognize the value of in-person collaboration, particularly when dealing with hardware. In my previous role, our consultancy worked closely with a UK-based client, and a week of in-person meetings in Epworth (near Leeds) led to rapid feature development. If considered for this role, I would be open to relocating to Toronto for a few months to onboard with the team. In the long term, I prefer remote work but would welcome opportunities to travel when needed.

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

Sincerely,

Gavin Guinn