|  |  |
| --- | --- |
| **Curt Henrichs** | Fremont, CA 94568 ▪ (262) 422-7274  [curthenrichs@gmail.com](mailto:curthenrichs@gmail.com) ▪ [LinkedIn](http://www.linkedin.com/in/curt-henrichs) ▪ [GitHub](http://www.github.com/curthenrichs) |

Date

Dear Mr. or Ms. **(Contact’s Last Name)**: or Dear Hiring Manager:

I am excited to apply for the **[Position Title]** role at **[Company Name]**, where I can bring my expertise in embedded system engineering, firmware development, and project management to contribute to your team’s success. The opportunity to work on innovative projects at **[Company Name]** aligns closely with my skills and passion for solving complex technical challenges.

In my current role as a Senior Embedded System Engineer at Integrated Dynamic Electron Solutions (IDES), I have played a key role in shipping numerous systems, including EDM beam blanking systems, Synchrony timing systems, and Relativity sub-framing systems, to enhance customer microscopy platforms. My contributions include designing and implementing voltage control firmware for flagship products, leading hardware bring-ups, and developing firmware for next-generation Xilinx Zynq SoMs. My experience demonstrates a balance of technical acumen and cross-functional collaboration, essential for delivering high-quality solutions in dynamic environments.

Key highlights of my qualifications include:

* **Firmware Development & Maintenance**: Extensive experience with FPGA/SoC firmware development, bare-metal and RTOS embedded C programming, and architecting robust firmware libraries.
* **System-Level Expertise**: Comprehensive knowledge of embedded systems across research, development, production, testing, and maintenance, with a proven ability to mitigate issues and ensure seamless integration.
* **Problem-Solving & Innovation**: Proficiency in debugging hardware and firmware, analyzing code and schematics, and implementing technical solutions for human-computer interaction and robotics research projects.

I am particularly drawn to **[Company Name]** because of its commitment to **[specific company value, mission, or project, if known]**. My ability to develop and maintain high-performing embedded systems, coupled with my focus on collaboration and attention to detail, would enable me to make a meaningful impact as part of your team.

I welcome the opportunity to discuss how my background aligns with the needs of **[Company Name]** for the **[Position Title]** role. Thank you for considering my application. I look forward to the possibility of contributing to your team’s success.

Best regards,

Curt Henrichs