

Gavin Guinn

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

October 3, 2024

Dear Hiring Manager,

Re: Application for Intermediate Software Developer at Wedge Networks (Competition: CAL-
ISD201909)

I am writing to express my interest in the Intermediate Software Developer position (Competition: CALISD201909) at Wedge Networks. I have over three years of experience developing production-grade C firmware for IoT products, which required a strong background in networking to handle offloading sensor and telemetry data to the cloud using a cellular modem. Utilizing Linux as a firmware development environment, I have developed my Bash and Python scripting skills to automate debugging and testing tasks.

In my previous role, I gained extensive experience debugging Layer 6 networking issues in cellular-connected IoT products. This involved developing edge-case handling for TCP, where packets often fail to be delivered reliably. By implementing robust error-handling mechanisms, I enhanced a wearable IoT product with immediate error prompts, improving user experience and increasing device reliability under challenging network conditions.

Additionally, I have hands-on experience with kernel development while debugging a faulty ACM TTY driver on an IoT device that prevented reading debug output on Linux. I delved into the kernel module code, bypassed error handling, and recompiled and reloaded the driver. While this led to a kernel panic, it provided valuable experience and deepened my understanding of Linux system internals.

I am particularly impressed by Wedge Networks' focus on real-time threat prevention and your innovative WedgeARP platform. I am curious about how Wedge Networks rolls out infrastructure to handle the computationally intensive threat detection tasks, especially considering the demands on network equipment and deployment. I have some hands-on experience with managing network equipment in my home network, such as configuring port forwarding to serve a website. While this is on a smaller scale, I understand the importance of efficient deployment and configuration of network resources, which aligns with my interest in your solutions.

With my foundation in C, C++, Java, Python, and my experience with UNIX/Linux systems, I am eager to contribute to your R&D team. I am well-versed in network technologies (TCP/IP, Layer 7 protocols) and have experience in RESTful API design—both critical components of your solutions. My familiarity with structured and unstructured databases and SCRUM methodologies would help me thrive in your agile development environment.

I would welcome the opportunity to discuss how my skills align with your needs at Wedge Networks.

Thank you for considering my application.

Sincerely,

Gavin Guinn