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RIVIAN - BMS SOFTWARE TEST ENGINEER

My name is Cole Fuerth, and I have been interested in a position at Rivian for years, ever since I first saw the RV1s make their appearance on Long Way Up. The RV1 platform is an incredible concept, I particularly love the camping package. The BMS Engineer position in particular is a perfect fit for me, I have a special interest in the field of battery management systems, and I have real experience in every point on the job posting. I specifically have experience with MATLAB, C/C++, Python, embedded systems, Linux, Windows, CAN, Git, Rust, Java, STM32, ESP32, Arduino, and multiple different battery chemistries. I can cover most of the stack associated with any kind of embedded controls, and have plenty of experience in the automotive field in general.

I am an embedded engineer with a specific interest in EVs and Battery Management Systems. I recently graduated from the University of Windsor, where I worked on the BMS Labs research team. I worked on a number of projects with this team, the most recent of which was forking the LibreBMS open source BMS project, to modify to use our own state of charge estimation algorithm, and to add IoT capabilities for data collection. I have been playing with lithium batteries since I was 15 years old, and have had a special interest in them ever since. I have been assembling my own batteries and battery management systems for all projects I have done since high school. My electronics engineering capstone was a fully-electric motorcycle, designed and built from the ground-up, including the charging circuits, power systems, controls, lighting, and all the other systems. I have also developed an air suspension control system for a private contractor outside Windsor, using Arduino, C++, I2C, and CAN to control the system.

My native languages are Python and C/C++, with Java and Rust as notable mentions. I spend most of my time working on personal projects, including a linux home server where I write scripts using bash and python to automate tasks, and a 3D printer that I built from scratch. I have recently been experimenting with concurrency in Rust with a friend who works at Nvidia. I love camping and making things with my hands, my camping setup is on an old motorcycle, with all my gear strapped to it.

I absolutely love the field of embedded systems, batteries, BMS, and the EV industry in general is ultimately my goal, and I would love to work at Rivian, as it is quite frankly my dream company to work with. I have been following the company for years, and I am very excited to see what the future holds for Rivian. I would love to be a part of that future.

Sincerely,

Cole Fuerth