

January 2, 2025

Kristin Rodriguez
Minnetronix Medical
1635 Energy Park Dr
St Paul, MN 55108

Dear Kristin Rodriguez,

I'm writing to apply for a Rotational Engineering position at Minnetronix Medical. As a recently graduated mechanical engineering student, I have always been attracted to problem solving and I'm excited to continue developing my skills. Through my FSAE and professional experiences, I have been able to add value to projects by creating solutions that target root issues. I would appreciate an opportunity to bring this experience to your team! I'm confident that my diverse technical knowledge, leadership skills, and design experience would make me a strong candidate for the Rotational Engineering role at Minnetronix.

During my time on Temple University's Formula SAE team, TFR, I've displayed my passion for problem solving and learning by spearheading projects in a variety of vehicle subsystems. While working on the systems integrations sub-team, I designed and fabricated the entire vehicle wiring harness to integrate the new MoTeC ECU platform. I worked directly with the powertrain team to set timing and calibrate engine sensors inside the M1 Tune software which further validated the harness. Furthermore, I collaborated with my team at the chassis dyno to create a baseline volumetric efficiency based electronic fuel injection, EFI, calibration. The final dyno plots showed an increase of roughly 3 hp and 3 ft-lb of torque in the mid rpm range (7-10k); making the engine deliver more consistent and drivable power. This resulted in our team placing 15th out of 120 teams at the 2024 global FSAE competition, breaking the school record by 9 places.

The Rotation Engineering position offers a unique opportunity to develop skills in several engineering disciplines while contributing to the medical device industry. With my hands-on experience designing and optimizing complex systems, I am confident that I would succeed in this role. By selecting me for this position, Minnetronix would gain a dedicated team member who is eager to innovate and grow along the company.

I would appreciate a chance to further discuss my qualifications in person or over the phone. Please don't hesitate to reach me at yak108@outlook.com or 570-533-6951. Thank you for your time and consideration!

Sincerely,

Jakob Werle