

September 29, 2024

Kelsey Diederich  
Sr. Early Talent Program Specialist  
Polaris  
2100 Hwy 55  
Medina, MN 55340

Dear Ms. Diederich,

I'm writing to apply for a Powertrain Engineering Early Development position at Polaris for the Fall of 2024. As a nearly graduated mechanical engineering student I have always been captivated by the creative and thoughtful designs that emerge from the motorsports industry. Having toured Polaris' facilities, I noticed how their focus on collaboration and testing has led to impressive powersports equipment. I would appreciate an opportunity to add value to your team. I'm confident that my diverse technical knowledge, leadership skills, and motorsports experience would make me a strong member of an engineering development team at Polaris.

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 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 a more consistent and drivable power delivery. This resulted in our team placing 15<sup>th</sup> out of 120 team at the 2024 global FSAE competition, breaking the school record by 9 places.

Acting as president of TFR taught me a tremendous amount about leadership. I was able to bring my skills to the professional world as the CAD administrator for NDI Engineering, where I oversaw the completion of a technical drawing package for a temporary submarine alteration project. Nearly 40 part and/or assembly drawings as well as multiple major system rip-out/installation plan drawings were effectively delegated to 4 other engineers. Contacting past project contributors and researching archival documents allowed me to gain the comprehensive systemwide understanding needed for my team. I tracked each task through a detailed spreadsheet which effectively shared project progress with Naval customers. Holding regular team meetings allowed project goals to be adapted to meet shifting customer requirements.

Being in the Engineering Early Development Program will require both technical expertise and leadership skills. I believe my experiences demonstrate that I would be a valuable addition to Polaris' engineering team. I would appreciate a chance to further discuss my qualifications in person or over the phone. Please don't hesitate to reach me at [jakob.werle@temple.edu](mailto:jakob.werle@temple.edu) or 570-533-6951. Thank you for your time and consideration!

Sincerely,

Jakob Werle