COLE MULLENBACH

Lincoln Park, MI | linkedin.com/in/cole-mullenbach/

641.832.8935 | colemullenbach@gmail.com

EXPERIENCE

EXCEL ENGINEERING | JAN 2024 – PRESENT

Controls Engineer | Detroit, MI | Mount Ayr, IA

- Develop and maintain custom Python, Bash, and MATLAB scripts to automate data uploads to servers and cloud platforms, streamlining test cell workflows and improving operational efficiency.
- Automated electric vehicle battery testing by designing test systems, building test cells, and integrating complex I/O systems with varying communication protocols.
- Coordinate end-to-end delivery of multiple control and test automation projects, balancing technical execution with system reliability, backups, and strict project timelines.
- Lead ICE emissions testing projects while ensuring EPA 1065 compliance.
- Configured and debugged CAN-based communication systems for powertrain testing, ensuring reliable data exchange between embedded controllers, instrumentation, and test automation scripts.
- Developed step-by-step technical documentation and quick-start guides for new team members, covering test cell operation, CAN communication setup, and automated data workflows.

IOWA ARMY NATIONAL GUARD | JAN 2018 – JAN 2024

Infantryman | Charles City, IA

- Completed a deployment overseas, gaining firsthand experience in leadership dynamics, observing and responding to both effective and ineffective leadership styles under challenging conditions.
- Led a team of 4 soldiers in the rapid setup and execution of mortar fire, ensuring accuracy and operational efficiency under time-sensitive conditions.

EDUCATION

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING | JAN 2019 – AUG 2024

Iowa State University

SKILLS

- Bash/Command Line
- Python
- Java
- CAN
- MATLAB
- CI/CD