

Controls Engineer

March 2025

About C-Motive

C-Motive is a startup with facilities in Middleton and Milwaukee, WI commercializing electric motors with sustainability and efficiency as top priorities. This technology was born out of UW-Madison and will be the first of its kind on the market.

Half of all electricity globally is consumed by electric motors. C-Motive's patented electrostatic motor technology delivers 95%+ efficiency, uses no rare-earth metals, less than 1% the copper, and has the potential to deliver over a gigaton of carbon savings in the next decade.



A C-Motive Electrostatic Motor

The global motor marketplace is \$100B annually and C-Motive is poised to become a significant player in the coming few years. No one else in the world is developing electrostatic machines and our goal is to become the reference motor technology for a new generation of products.

Controls Engineer

Variable speed motors cannot function without a variable frequency drive, and C-Motive's electrostatic motor is no different. Because nothing in the world works quite like it, we must engineer our own drive to make it sing.

C-Motive is seeking a controls engineer within the drive development team to expand the functionality, usability, connectivity and reliability of our drive products. The individual will be responsible for the implementation of control laws and algorithms within the drive, as well as identifying drive improvements to simplify drive commissioning and usability in real-world industrial environments.

This position is expected to have a solid understanding of control system theory, supplemented with real-world control systems experience. At a minimum, the individual should know how inverters behave and communicate as part of larger systems, and preferably should be well-versed in industrial communications and VFD commissioning and use.



This position will work closely with other teams to move quickly and collaboratively. Prior start-up company experience is a strong plus but is not required. We are looking for someone that enjoys tackling day-to-day challenges, enjoys hands-on work, actively prioritizes tasks, is highly organized, communicates and documents effectively, and produces high-quality, low-cost hardware quickly and efficiently.

What You Will Do

- Develop variety of tuning parameters and commissioning procedures for drives, including for general use and specific applications
- Work with drive development team to implement industrial-standard communications protocols
- Identify customer usability improvements of drives related to connectivity and controlling the motor/drive system within real-world industrial environments
- Develop and improve testing methodologies to ensure functionality with industry-standard equipment, e.g., PLCs and HMIs
- Assist with specification and implementation of internal infrastructure build-out which incorporates networked industrial devices

Qualifications

- Minimum 3 years of experience implementing real-world control systems
- Master's degree or equivalent in control systems or related technical field
- Experience using and implementing industrial communications protocols, e.g., Modbus (TCP/RTU), EtherNet/IP, PROFINET, EtherCAT, BACnet, OPC UA, MQTT
- Referenced strong written and verbal communication skills

Bonus Qualifications

- Experience programming, utilizing, designing and/or developing controls for variable frequency drives, automotive inverters, or similar products, using a variety of makes, models and configurations of equipment
- Experience developing programs for industrial controls, e.g., ladder logic, PLCs, sensors over EtherNet/IP, Modbus, etc.
- Background in physics-based controls methodologies
- Experience working with high voltage electrical equipment and an understanding of electrical shock hazards

C-Motive is committed to equitable compensation and we offer a generous benefits package to make sure you have the support you need. We offer a take-what-you-



need paid time off program and every employee, regardless of gender identity or expression, is eligible for paid parental bonding leave. We have implemented a 401k program and all employees are granted stock options with typical vesting periods. We are committed to creating an inclusive environment for all our employees and are seeking to build a team that reflects the diversity of the people we hope to serve with our revolutionary products. C-Motive is proud to be an equal opportunity employer.

To learn more about C-Motive, our team, and our company culture, please visit: c-motive.com/about/mission-vision-and-values.

To apply for this position, visit [this link](#).