Software Developer Internship

April 2025

About C-Motive

C-Motive is a startup in Middleton, 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. 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.

A C-Motive Electrostatic Motor

Software Developer Internship

C-Motive is seeking an eager, high-energy college intern to develop software tools to accelerate our internal operations and improve visibility into our motor performance and reliability data. This individual will work closely with C-Motive's talented engineering and operations teams to not only design and implement these new software tools, but also establish an easy-to-use workflow and UI/UX. The individual will have near-complete ownership of in-house applications from start to finish, including deciding to use AI/ML as appropriate for specific projects.

C-Motive's electrostatic motor development is a ground-up reinvention of rotating electric machinery, therefore the typical indicators of quality, lifetime and mechanical wear inside motors do not apply. Instead, our motor parts have been examined and processed by hand: time-consuming and error-prone tasks. AI-based

image recognition techniques are ideally suited to accelerate some of these tasks. Other projects include automating our high-power custom dynamometer system, processing data to find patterns and identify the most meaningful results, and additional opportunities may also exist for hardware development.

The ideal candidate will have a strong background in data and/or computer science including programming (preferably in multiple languages), and prior experience selecting and using AI-based tools such as image classification models, neural networks, TensorFlow, OpenCV, etc. The candidate should also enjoy writing user-friendly applications for use by others. We are looking for someone that enjoys tackling day-to-day challenges, enjoys hands-on work, is highly organized, and takes pride in delivering results.

What You Will Do

- Collaborate with our engineering, testing & operations teams to develop application requirements and sketch out the application's UI/UX and back-end.
- Develop new or major revisions of application(s), including identifying appropriate libraries and training the application, if needed.
- Test, iterate on, and deploy the new application(s) in a real production environment.

Qualifications

- Admitted to an undergraduate or graduate Computer Science/Engineering, Electrical Engineering, Data Science or similar program.
- Experience programming Python and similar languages.
- Strong written and verbal communication skills, and highly organized.
- (Bonus) Experience using AI-based tools and libraries (e.g., CNNs, TensorFlow, OpenCV) for image recognition applications.
- (Bonus) Hardware development experience.

C-Motive is 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. We are 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