Job Title: Co-op/Intern Engineer   **Exempt**
Department: Engineering   **Non-exempt X Hourly**
Reports to: Research and Development Engineer   **EEOC Code 2**

Position summary: We are seeking motivated Co-Op and Intern Engineers to join our Engineering team in Canton, Ohio. As a team member, you will contribute to the development of an Industrial Internet of Things (IIoT) telemetry system for saw blade usage. Depending on your interests and expertise, you will have the opportunity to focus on one or more of the following areas:

- **Data Analysis:** Analyze collected data to gather insights on customer usage patterns and blade performance.
- **Firmware Development:** Develop firmware for Bluetooth Low Energy (BLE) sensors using C and C++ on a Real-Time Operating System (RTOS).
- **Hardware Development:** Expand the capabilities of BLE sensors, including hardware design and prototyping.
- **Backend Development (Gateway):** Work on the IIoT gateway to orchestrate, filter, and process incoming sensor data.
- **Frontend Development:** Develop the operator interface for the IIoT system.
- **Backend Development (Cloud Sync):** Develop cloud synchronization functionality between gateways and the central database.
- **Data Visualization:** Create tools for users to visualize aggregated data and monitor facility performance.

Essential functions:
- Collaborate with engineering, sales, and marketing teams to deliver on your assigned section of the project.
- Participate in the design, development, testing, and implementation of solutions within your focus area.
- Assist with installing and maintaining sensors on saw equipment as needed.
- Contribute innovative ideas to enhance system functionality and performance.
- Document your work and present findings to team members and stakeholders.

Skills and experience:

- Familiarity with one or more of the following, depending on your focus area:
    - **Data Analysis**: Python, SQL
    - **Firmware Development**: C, C++, Zephyr RTOS, NRFConnect
    - **Hardware Development**: KiCad, PCB prototyping, soldering
    - **Backend Development (Gateway)**: Go, SQL
    - **Frontend Development**: React, TypeScript
    - **Backend Development (Cloud Sync)**: Go
    - **Data Visualization**: SQL, Grafana
- Strong problem-solving skills and the ability to work both independently and collaboratively.
- Excellent communication skills, both verbal and written.
- Prior internship or project experience is preferred but not required.

Education Requirements:
- **Co-Op Positions:** Open to Bachelor's and Master's students in Mechanical, Electrical, Software, Computer Engineering, or related fields.
- **Internship Positions:** Open to Master's students in Mechanical, Electrical, Software, Computer Engineering, or related fields.

Region: N/A
Location: Canton, Ohio
Travel: N/A
Relocation: N/A
Reports to: Research and Development Engineer
Supervises: N/A

Works with: Engineering, IT and hourly employees

Duration:

- **Co-Op Positions:** Spring or Summer 2025.
- **Internship Positions:** Spring to Summer 2025.

Physical demands and work environment: The physical demands and work environment characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

- Physical demands: While performing duties of job, employee is required to stand, walk, sit, reach with hands and arms, talk, and hear. Employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by the job include close vision, distance vision, peripheral vision, depth perception, and the ability to adjust focus. Safety glasses required in all areas of manufacturing.
- Work environment: The noise level in the work environment is usually moderate but may require hearing protection in some areas.

General sign-off: The employee is expected to adhere to all Company policies and to act as a role model in the adherence to policies.

I have read and understand this explanation and job description.

Signature: _____   **Date: _____**