



We are looking for embedded system software engineering interns during the summer 2022 period to work in our corporate innovation lab. This lab consists of a small, diverse team of engineers working on cross functional projects for multiple different businesses. The lab is located inside of the mHUB startup incubator in downtown Chicago, team members will have access to the whole facility.

The Team will focus on IoT or Industrial IoT projects and implementation in real facilities. Team members are expected to have strong problem-solving skills and be able to independently learn new things and technologies. Projects scope will include architecting, software writing, implementation, testing, presenting the results and creating documentation of thought process and design so others can continue the work.

Responsibilities & Duties:

- Experience and drive to work with embedded computers to take information from systems and control mechatronics of devices
- This position will involve the designing and coding of a variety of systems for several types of applications in both business settings, as well as in R&D, and product development areas
- You will work side-by-side with members of IIoT/IoT group, and will be expected to innovate quickly and apply novel, embedded driven solutions to real-world challenges
- In particular, the intern will be building software programs to embedded system.
- Participate in engagement and peer-programming sessions between software engineers to identify problems/gaps as well as innovation opportunities that can be solved or enabled by coding and designing
- Implement and test models in a POC (proof of concept) scale to operationalize the outcomes of the computer programs and validate the results in the real-world
- Be encouraged and expected to innovate and be creative in your coding, problem solving and presentation of solutions

Qualifications & Skills

- At least a junior year student with a focus in Electrical, Software, or Computer Engineering, Computer Science, or related technical field.
- Must be able to solve basic data structures and algorithms.
- High level of basic computer skills (Microsoft Applications and Internet)
- Training and/or experience in embedded programming with a variety of microchips (Arduino, Raspberry Pi, ESP32, etc).
- Experience with coding languages such as Python and C/C++.
- Experience with communication protocols such as SPI, UART, and I2C.
- Experience with the basics of electronics and circuitry design, including the use of a variety of sensors.
- Excellent written, verbal communication and presentation skills.
- Demonstrated ability to effectively share technical information



Marmon Holdings, Inc.

A Berkshire Hathaway Company

Job Description Embedded Systems Software Intern

- Strong analytical and problem-solving skills.

Work Hours:

- Able to work at least 10-12 weeks (starting the end of May through August)
- Regular, dependable attendance and punctuality.
- Remote work is available based on what work product is being executed.
- The team will meet once per week in person to have lunch and have face to face project updates. This is contingent on company policies on COVID situation.
- Interaction with India group may involve some late even calls outside of normal business hours.

Salary & Benefits:

- This will be a paid internship ranging from \$18 to \$25 based on experience
- Full access to mHUB facility, labs, and training classes.
- Several outings and events with other Marmon interns.
- Field trips to visit other Marmon facilities to learn about us.

Company Profile:

Marmon Holdings, Inc., a Berkshire Hathaway company, is a global industrial organization comprising 11 diverse business sectors and more than 170 autonomous manufacturing and service businesses with revenues that exceeded \$8 billion in 2021.

As an equal opportunity employer, we are committed to diversity in the workforce. In accordance with applicable law, we prohibit discrimination against any applicant or employee based on any legally recognized basis, including, but not limited to; race, color, religion, sex (including pregnancy, lactation, childbirth or related medical conditions), sexual orientation, gender identity, age (40 and over), national origin or ancestry, physical or mental disability, genetic information (including testing and characteristics), veteran status, uniformed service member status or any other status protected by federal, state or local law.