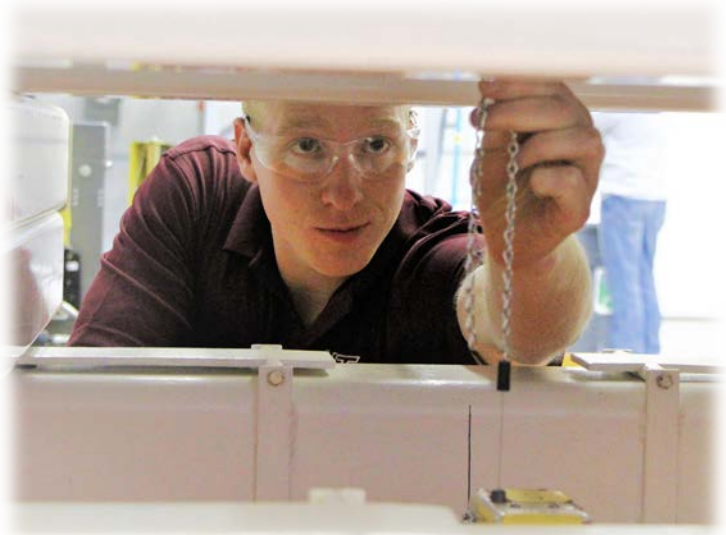




Packaging IoT Development Intern

Center for Packaging and Unit Load Design at Virginia Tech

Description: The Center for Packaging and Unit Load Design (CPULD) is one of the most experienced research centers in the area of package, pallet and unit load design. The Center, established in 1976, has been actively involved in the development of ISO, ASTM, and MHIA standards related to the transportation of goods, with a focus on environmental responsibility and sound economics. Our facilities feature a comprehensive pallet and packaging testing lab, and material handling equipment similar to that found in industrial warehouses.



The Center's team includes experts in packaging, palletization, material handling and unit load design, who perform contract testing services, continuous education short courses, and contract research. Research at CPULD focuses on the development of systems-based technologies to optimize the relationship between the design and performance of unit loads, and maximize the efficiency of the complete system. The Center started to work on the development of an intelligent pallet system and on the implementation of IoT in the distribution packaging sector. We are currently looking for one or two undergraduate or graduate students to aid the development of the intelligent packaging systems.

The Packaging IoT Development position will focus on the development of a smart pallet equipped with accelerometers, temperature and relative humidity sensors. The position will require a throughout understanding of use electrical systems, programming of low cost single board computers, communication networks, and data processing.



Responsibilities:

- Design and build working sensors capable of recording acceleration, temperature, shock, location and communicating the results throughout the internet using low cost single board computers
- Develop control programs for specialized data collection

Requirements

Only students currently enrolled at Virginia Tech are eligible to apply. Applicants must have a working knowledge of programming languages such as Python, C++, familiarly with accelerometers, temperature sensors, IoT, raspberry Pi, or other low cost single board computers. The applicant must be able to work independently.

Majors

Computer science, electrical engineering, mechanical engineering or related.

Timeframe:

The position is available immediately and will be available throughout Fall 2018 and Spring 2019.

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