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Abstract

Assembling and programming an IoT scale sensor

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IoT technology has been proclaimed as a new technological prowess that will change our economy, our cities and our way of living. Despite these bold statements, IoT is far from being implemented by ordinary tech companies not directly working with any of the enabling technologies, such as telecom. To bridge this gap, this paper serves as a guiding post on how to implement and program a smaller IoT device connected to an external sensor. Using a microcontroller, a hardware connection with a load cell is implemented. Due to time constraint, the data transmission tests are done with a virtual dataset using Wi-fi. Dimensions such as energy efficacy and data error detection are discussed as well, in addition to future work that could further improve these types of projects. The findings of these paper show that the technology and hardware necessary for this type of project are readily available to the general public and thus can be used in the development of new consumer products.

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