

Abstract Submitted
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Environmental Monitoring with Wireless Sensor Networks ERIC VICKERS, PAUL LUCKEY, EZEQUIEL GARCIA, JOSEPH PRINE, RYAN INTEGLIA¹, HARISH CHINTAKUNTA², Florida Polytechnic University — In a collaboration project with Skanska Construction, students at Florida Polytechnic University were given an opportunity to create a system that would monitor different conditions at construction sites close to areas actively serving patients. Our research brings together state-of-practice technologies in an efficient way to reduce the cost of environmental monitoring. We monitor differential pressure, vibration, noise, and particulates in the air. Our sensor node consists of a microcontroller that receives the data from the sensors, turns the data into packets, and transmits to a central receiving node with a radio communication device. The central receiving node parses, stores, and processes the data for visualization. We have completed and tested the proof of concept and our current efforts include field testing and calibration of the sensors.

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