

9-4-2014

An Autonomous Robotic Indoor Environment Surveillance System

Andrew Gunnerson
Cleveland State University

Bogdan Olar
Cleveland State University

Haodong Wang
Cleveland State University, H.WANG96@csuohio.edu

Follow this and additional works at: https://engagedscholarship.csuohio.edu/u_poster_2014

 Part of the [Robotics Commons](#)

How does access to this work benefit you? Let us know!

Recommended Citation

Gunnerson, Andrew; Olar, Bogdan; and Wang, Haodong, "An Autonomous Robotic Indoor Environment Surveillance System" (2014). *Undergraduate Research Posters 2014*. 15.
https://engagedscholarship.csuohio.edu/u_poster_2014/15

This Article is brought to you for free and open access by the Undergraduate Research Posters at EngagedScholarship@CSU. It has been accepted for inclusion in Undergraduate Research Posters 2014 by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.



This digital edition was prepared by MSL Academic Endeavors, the imprint of the Michael Schwartz Library at Cleveland State University.

An Autonomous Robotic Indoor Environment Surveillance System

Monte Ahuja College of Business

Student Researchers: Andrew Gunnerson and Bogdan Olar

Faculty Advisor: Haodong Wang

Abstract

We developed an autonomous mobile robot platform capable of following a path and gather environmental data, including temperature, humidity, light intensity, etc. The robot is capable of detecting the path using its camera and correct most navigational errors, while the sensors support a limited set of instructions regarding which sensor data to collect and how often. Our experiment consisted of having the robot follow a looped path we set up in BU004 Lab. The robot was able to complete the loop and gather sensor data for light intensity, humidity and temperature at a frequency of once per second, and also positional data provided by the robot at around the same frequency.