

Illinois Center for Wireless Systems

ICWS Seminar Series

RFID Tag Location and Distance Analysis to Maximize the Number of Recognized Tags

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Monday, January 8, 2007, 2:00 p.m.
141 Coordinated Science Laboratory

The RFID tag location on the object to be recognized has turned out to be very important to maximize the number of recognized tags. The read field distance is required to be long enough to secure the working space. There is currently no standard for them and very little work has been done in this area. This presentation introduces a simulation method to establish the best tag location, read field, and reader height. In particular, the best tag location, read field, and reader height are provided for recognizing the tags attached to cartons stacked on the pallet. Besides, an intelligent neural network machine learning approach has been applied making use of the best historical tag location and direction data in order to replace the tedious simulation work.

Brief speaker biography:

- Areas of Interest: Wireless Communications & Ubiquitous
- Computing, RFID
- Ex-IT Team Leader, Samsung Electronics, South Korea
- Ph.D., Computer Networks, Dept. of Industrial and Information Systems, Lehigh University, USA
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CWS Seminar Series is supported by a grant from Rockwell Collins