AN RF–BASED SURVEILLANCE SYSTEM USING COMMERCIAL OFF–THE–SHELF WIRELESS LAN COMPONENTS (ThuPmOR9)

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Abstract :
In this paper, we present an indoor surveillance system implemented using the commercially available wireless LAN infrastructure. Taking advantage of the programmability of the wireless network nodes, we have built a wireless network that has two modes of operation: the communication mode, when the network is used as a traditional wireless LAN, and the surveillance mode, when the network is used as a distributed sensor network that can detect illegal intrusion by detecting changes in the propagation environment caused by the intruder. The experimental results show promising through–the–wall intrusion detection capabilities in an office environment.