

Implementation of CSMA/CA MAC protocol in Wireless Networks

ECE scholarly Paper presentation

by

Amruta R. Pathrikar

Scholarly paper Advisor: Dr. Bijan Jabbari

Graduate Academic Advisor: Dr. Kathleen Wage

Engineering building, Room number 3202

07/31/2009 at 11:30am

Abstract:

The growth of internet over the last few years has been considerably huge, resulting in ever-increasing demand for wireless data transmission. Thus, the implementation of Wireless Local Area Networks (WLAN) like ad hoc wireless network becomes inevitable. The implementation of CSMA (Carrier Sense Multiple Access) based MAC protocol for wireless networks, moderates the access to the network in a random manner. The random behavior can cause severe effects like hidden terminal problem or exposed device. This paper focuses on the ways to overcome the hidden terminal effect by implementing CSMA/CA technique with RTS/CTS. This paper presents the simulation of Wireless Networks and its throughput performance using NS-2 simulator.