Available Online at www.ijcsmc.com

International Journal of Computer Science and Mobile Computing

A Monthly Journal of Computer Science and Information Technology

ISSN 2320–088X

IJCSMC, Vol. 2, Issue. 3, March 2013, pg.41 – 45

RESEARCH ARTICLE

Signal Strength and System Operating Margin Estimation for Vehicular Ad-Hoc Networks in Rayleigh Fading Environment

Tilotma Yadav[1], Partha Pratim Bhattacharya[2]
[1]Department of Electronics and Communication Engineering Faculty of Engineering and Technology,
Mody Institute of Technology & Science (Deemed University), Lakshmangarh, Rajasthan, Pin-332311, India.
[2]Department of Electronics and Communication Engineering Faculty of Engineering and Technology,
Mody Institute of Technology & Science (Deemed University), Lakshmangarh, Rajasthan, Pin-332311, India.

[1]*tilotmayadav90@gmail.com*; [2] *hereispartha@gmail.com*

Abstract: In this paper, signal strength and system operating margin (SOM) are estimated for vehicular ad-hoc networks in absence and presence of Rayleigh fading. The free space propagation model and Ad-hoc IEEE 802.11 models are discussed and later has been used to estimate signal strength and system operating margin. Rayleigh fading was then simulated and signal strength and system operating margin are estimated in Rayleigh fading environment.

Keywords: Vehicular Ad-hoc network; propagation models; IEEE 802.11 model; system operating margin; Rayleigh fading

Full Text: http://www.ijcsmc.com/docs/papers/March2013/V2I3201308.pdf