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The FPBA algorithm with controlled capture ICC2001 (Conference Paper)

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Abstract

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In this paper, we introduce a new mixed priority scheme that utilizes the LESRTPL model [5] to control the assignment of the transmitter power levels, assigned to each priority class, whose contending over the wireless channel using the FPBA algorithm [1] to capture the channel. The wireless channel capture model includes Rayleigh fading, shadowing, and path loss. The performance of the algorithm is evaluated using simulation models. Results show that the new priority scheme offers significant improvement to the throughput and the waiting time of the different priority classes, especially to high priority class packets.

SciVal Topic Prominence

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References (6)

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1 Habaebi, M.H., Ali, B.M.

Adaptive framed pseudo-Bayesian Aloha algorithm with priorities

(2000) *Electronics Letters*, 36 (13), pp. 1145-1147. Cited 2 times.
doi: 10.1049/el:20000845

View at Publisher

2 Habaebi, M.H., Ali, B.M.
Improving the FPBA algorithm performance using random transmitter power levels
(2001) *IEE Proceedings on Communications*
in press

3 Goodman, D.J., Valenzuela, R.A., Gayliard, K.T., Ramamurthi, B.

Packet Reservation Multiple Access for Local Wireless Communications

(1989) *IEEE Transactions on Communications*, 37 (8), pp. 885-890. Cited 523 times.
doi: 10.1109/26.31190

View at Publisher

4 Biswas, S.K., Reininger, D., Raychaudhuri, D.
UPC base bandwidth allocation for VBR video in wireless ATM
(1997) *Proceedings ICC'97*. Cited 8 times.
Montr'eal, Canada, June

5 Lamaire, R.O.

On the randomization of transmitter power levels to increase throughput in multiple access radio systems

(1998) *Wireless Networks*, 4 (3), pp. 263-277. Cited 62 times.
http://www.springerlink.com/content/1022-0038
doi: 10.1023/A:1019164308540

View at Publisher

6 Zorzi, M., Rao, R.R.

Capture and Retransmission Control in Mobile Radio

(1994) *IEEE Journal on Selected Areas in Communications*, 12 (8), pp. 1289-1298. Cited 200 times.
doi: 10.1109/49.329345

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