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## Performance analysis on Bayesian information criterion in long term evolution

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The rise of real time multimedia application demands in faster internet connection makes LTE to become an important medium of transmission to fulfill these requirements. However, handling multiple simultaneous multimedia transmissions is a challenging task in LTE due to the characteristics of the traffic. Popular proportional fairness scheduling algorithm, such as Modified Largest Weighted Delay First (M-LWDF) has been proposed to have better bandwidth distribution. Somehow, video and VoIP traffic are affected by other best effort flows in M-LWDF approach. Best effort flow such as internet surfing does not require a huge amount of bandwidth allocation whereas a sufficient amount from the best effort bandwidth allocation for best effort can be reallocated to video and VoIP flows. In this paper, an adaptive algorithm named Criterion-Based Algorithm (C-B), Criterion-Based Proportional Fairness (C-BPF) and Criterion-Based Modified Largest Weighted Delay First (C-BMLWDF) based on Bayesian Information Criterion (BIC) had been proposed by the author. The result simulation of the solution had shown a better performance in throughput, delay, packet loss and fairness index of both video and VoIP transmission with a respective allocation for the best effort flow.

### Biography

Wee Kuok Kwee completed his BSc in Computer Science and MSc in Networking from University Putra, Kuala Lumpur, Malaysia. He completed his PhD (Engineering) from Multimedia University, Malaysia. He is currently Deputy Director of Collaboration and Innovation Center and Senior Lecturer at Faculty of Information Science and Technology, Multimedia University, Melaka, Malaysia. He is also an Editorial Board Member of International Journal and Senior Member of IEEE. His research interests include "Quality of service, broadband wireless access, networking and mobile communication".

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