

# **Abstract**

**Mohamed S El-Mahallawy**

## **Modified earliest deadline first scheduling with channel quality indicator for downlink real-time traffic in LTE2014 networks**

Long-Term Evolution (LTE) is a recently evolving technology. It offers very high speed for mobile sets with the same data rate as other electronic devices that can access the internet. Such technology is intended to support a variety of IP-based heterogeneous traffic. In this paper, a modified Earliest Deadline First (EDF) scheduler is proposed based on the channel quality indicator (CQI) scheduler. The simulation results of the modified EDF-CQI (M-EDF-CQI) indicate the superiority of the proposed scheduling algorithm in terms of average throughput, average delay, packet loss ratio and fairness index