

Abstract

Video and data is becoming the dominant traffic over the Internet. To be able to detect, fix and replace lost data and voice packets along User Datagram Protocol (UDP), we apply artificial intelligent optimization. The two artificial intelligence (AI) algorithms applied in this work are Modified Artificial Bee Colony (MABC) and Modified Particle Swarm Optimization (MPSO). These algorithms show great improvement in preventing packet loss and making transmission reliable. Further test of the MABC and MPSO reveals that there is improved optimization of data and voice packet delivery. Another comparison demonstrates that MPSO is significantly better than MABC in overall performance.

Keywords- Artificial Intelligence, Algorithms, Optimization, Artificial Bee Colony, Particle Swarm Optimization, UDP.