Abstract

Video and data is becoming the dominant traffic over the Internet. To provide better Quality of Service (QoS) to end users, it is important for network operators, content providers to optimize their transmission. In this research work, artificial intelligent optimization algorithms for video and data packets transmission over User Datagram Protocol (UDP) is presented. UDP is an important protocol used in applications of sending voice over IP, instant messaging and E-mail delivery. UDP has shown to be unreliable protocol that drops packets over the network whilst at the same time crucial contents of information tends to be lost along the way hence degrading overall performance (Stallings, 2007). This paper highlights the development, design, testing of Artificial Intelligence (AI) optimized voice and data at the UDP functioning within the Transport Protocol. The two artificial intelligence (AI) algorithms applied in this work are Artificial Bee Colony (ABC) and Particle Swarm Optimization (PSO).

Index Terms

Computer Science

Algorithms

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