

ABSTRACT

In the era of ever-evolving technology, the need for a fast and efficient internet connection is increasing. One of the latest developments in network technology is the introduction of 6G networks, which are expected to provide faster connections, lower latency, and greater capacity than previous generations. In addition to 6G Internet, another development that is not felt directly by internet users but is very useful is the development in Edge Computing-based data processing. This research involves measuring and analyzing the effect of the number of IoT devices and the distance between devices on the utilization of Edge Computing on 6G networks using the EdgeGo algorithm. According to experimental result, the completion time measurements at different speeds provide valuable insights into the efficiency of Edge Computing. Under a speed of 5 m/s, the completion times for N1 and N2 range from 1.1881e+03 to 1.1697e+03, while at a speed of 10 m/s, they range from 1.1886e+03 to 1.1927e+03. This data highlights the impact of speed on the completion time of tasks in the Edge Computing environment. By analyzing the utilization of Edge Computing in relation to the number of IoT devices, distance between devices, and computational overhead, this research aims to enhance the efficiency and performance of Edge Computing in 6G networks.

Keywords: *EdgeGo algorithm, 6G Network, Edge Computing.*