

Resource Allocation in Fog Computing

Amir Rashid Bhat¹, Abdul Gaffar Mir¹, M. Irfan Bala² and M. Ahsan Chishti²

¹Electronics & Communication Engineering Department

²Computer Science & Engineering Department

National Institute Of Technology

E-mail: aamir.amy24@gmail.com

Abstract—Fog computing is an emerging paradigm of cloud computing which is required to meet the growing computation demand of mobile applications. It can help mobile devices to overcome resource constraints by offloading the computationally intensive tasks to cloud servers. The challenge of the cloud is to minimize the time of data transfer and task execution to the user, whose location changes owing to mobility, and the energy consumption for the mobile device. To provide satisfactory computation performance is particularly challenging in the fog computing environment. In this research we have discussed how fog computing is better than cloud computing in IoT applications and we have worked on the Task offloading problem in Fog computing. We have implemented two task scheduling algorithms Random task scheduling algorithm and Round-Robin algorithm. Further we have compared their results and on the basis of these results we have chosen Round-Robin algorithm is best for task offloading in fog computing than Random algorithm.