

Smart grid network scheduling and forecasting using 5g network slicing

Ayesha Feroz ^{1*}

¹FAST University, Pakistan

Abstract

A smart grid is the modern form of the power grid that uses communication technology to collect information from the power grid. 5G network slicing is an ideal choice for smart grid services. It divides the network into different isolated networks in which each one is considered as a slice. It allows the power grid to customize each slice according to network requirement to perform a specific task. Simultaneously, it comes with some technical challenges to accommodate the needs of different smart grid requirements. An algorithm is needed to develop forecasting techniques that adjust the allocated slice resources to optimize network utilization. Key functions perform by the novel algorithm is to analyze and predict the traffic of each slice and to control new requests for using particular network slice. As the number of intelligent terminals increases rapidly in SG, scheduling of network resources become much more significant to ensure high priority of urgent and low latency services. Our proposed algorithm will play its part in the green energy grid.

Biography

J Ayesha Feroz has completed her MS from FAST University. She is an author of two research article in a peer review journals.

Note: This work is partly presented at event on Artificial Intelligence, IOT and Robotics (July 19-20, 2021 | Paris, France)