Software Quality Assurance in 5G Technology-Redefining Wireless Communication: A Comprehensive Survey

Authors : Sumbal Riaz, Sardar-un-Nisa, Mehreen Sirshar

Abstract : 5G - The 5th generation of mobile phone and data communication standards is the next edge of innovation for whole mobile industry. 5G is Real Wireless World System and it will provide a totally wireless communication system all over the world without limitations. 5G uses many 4g technologies and it will hit the market in 2020. This research is the comprehensive survey on the quality parameters of 5G technology.5G provide High performance, Interoperability, easy roaming, fully converged services, friendly interface and scalability at low cost. To meet the traffic demands in future fifth generation wireless communications systems will include i) higher densification of heterogeneous networks with massive deployment of small base stations supporting various Radio Access Technologies (RATs), ii) use of massive Multiple Input Multiple Output (MIMO) arrays, iii) use of millimetre Wave spectrum where larger wider frequency bands are available, iv) direct device to device (D2D) communication, v) simultaneous transmission and reception, vi) cognitive radio technology.