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| **Abstract:** |  |
| A popular approach, called as Radiolocation, measures parameters of radio signals that travel between a Mobile Station (MS) and a set of fixed transceivers, which are subsequently used to derive the location estimation of MS. The purpose of this research was to investigate the performance of Time of  Arrival (TOA) based Radiolocation approach for finding the location of MS in the CDMA cellular networks. Another aim was to find out suitable location estimation algorithm using measured parameters by Radiolocation approach. Finally, the accuracy of the Radiolocation was examined by comparing two different location estimation algorithms. Two different algorithms for position estimation methods, named as Neural Networks and Least Square algorithms, were used to determine the location of MS. The simulation results suggested that the Neural Network algorithm provides better accuracy in position estimation which were depicted by supportive simulation results in the article. | |