

# Mobility Management of the Hybrid Mobile Communication

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## ABSTRACT

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Staying connected to the network regardless of location is the dream of everyone in the world. However, a single base station or access point is unable cover the whole world, but numbers of base stations from different systems will do. Therefore to achieve global coverage, hand over must be done from one base station to another base station, regardless of intra-hand over or inter system hand over.

This project is proposed to compare the performance of Adaptive Neuro Fuzzy Interference System (ANFIS) based hand over decision algorithms between two different communication networks with other traditional algorithms such as relatives received signal strength, received signal strength with threshold, received signal strength with hysteresis, and received signal strength with threshold and hysteresis.

With the combination of Fuzzy logic system and Artificial Neuro Network, these enable ANFIS to behave differently with different training data sets. A set of training data are generated using Fuzzy logic system to train the ANFIS. This trained ANFIS is being compared with the Fuzzy logic system to check its ability to mimic the particular Fuzzy Logic System.