

Start

Initialization of  
Defferential Evolution  
and neural network.

Formulate a neural  
network  
Calculate fitness  
Array

DE Procedure

Selection

Crossover

Mutation

Termination check of  
overal Algorithm

False

True

Calcutation of Lower  
and Upper bounds of  
optimal values

Apply a Local Search  
procedure

Apply the Neural  
Network in to  
objective problems

End

