Title: Addressing the suitability of the activation function kind on feed-forward neural networks

Name: Antonio J. Tallón-Ballesteros
University of Seville, Seville 41012, Spain

This paper analyses the suitability to include hyperbolic tangent units within neural networks based on Multilayer Perceptron (MLP) trained by means of a back propagation algorithm. The experimentation is conducted out in classical problems from the scope of health and also with data sets from high dimensional domains. As a main conclusion could be drawn that hyperbolic tangent are very handy. On the other hand, the training of this kind of neural networks is a drawback. The setting of the parameters is an issue. The results, compared to those of sigmoid activation function, are very promising and very often better. This is the starting point to design other kind of activation functions.

Biography

Antonio J. Tallón-Ballesteros completed his PhD in 2013 from the University of Seville. He has been a Lecturer since 2005. He got the accreditation to Senior Lecturer in 2013. He has recently been a Programme Co-chair of some conferences such IDEAL 2016, ICDIM 2016 and FSDM 2016. He has been an active member of the programme committe of a great deal of conferences in the last 10 years, such as HIS, ICADIWT, FUTURE COMPUTING, ISDA, IWINAC, INTECH and NaBIC. He has published more than 40 publications. Among them, the selection could consists of 6 papers which are listed in the Journal Citation Reports by Thomson Reuters.

Presenting author details
Full name:
Contact number:
Twitter account:
Linked In account:
Session name/ number:
Category: (Oral presentation/ Poster presentation)