OMICS International
conferenceseries.com

World Congress on
Industrial Automation

July 20-22, 2015 **San Francisco, USA**

Industrial Engineering based on unconventional Design Theories

Alessandro Naddeo
University of Salerno, Italy

Research activity is mainly concerning about Virtual Prototyping e Methods Development for Industrial Engineering based on unconventional Design Theories Axiomatic Design, Information Theory, Design under Uncertainty, AHP, Fuzzy Logic, Dempster-Shafer Theory and others. In this field Computerized Representation, Modeling and Simulation Methods have been studied in order to optimize and innovate processes and products. The main effort is done for studies about Biomechanics, Ergonomics and Comfort, Human-Machine Interfaces, Heath and Passive/Active Safety in Automotive field of research. Several collaborations with Italian and International companies and research labs have been made in order to guarantee an immediate applicability of research; Some of them are FIAT, Alenia Aerospace, Stamec, Ansaldo Breda, CNH, TNO Research Center, TASS France.

anaddeo@unisa.it

A robust ANN-based price forecasting model for deregulated electricity market

Abdollah Ahmadi[1], Hani Mavalizadeh[1], Adel M Sharaf[3] and Ali Esmaeel Nezhad[1]
[1]Islamic Azad University, Iran
[2]Sharaf Energy Systems, Inc, Canada

This paper proposes an Artificial Neural Network (ANN) approach to forecast the next week electricity market prices. In restructured power systems a lot of factors affect the electricity prices. Provided that market participants have to know the future prices, they can model their risk management strategies. In this paper, among different forecasting tools, ANN is used to perform this task due to its flexibility and simplicity. Historical load data as well as historical price data are used to train the neural network. In this work a three-layered feed-forward neural network is selected to forecast the next week prices. Besides, a new incremental neural network is employed applying the initial knowledge to adapt the learning process and modify the weights in each step. The proposed approach has been implemented in mainland Spain and California markets to assess the accuracy of the forecasted values obtained from the proposed neural network.

ahmadi.abdollah.janah@gmail.com

Adv Robot Autom
ISSN: 2168-9695 ARA, an open access journal

Industrial Automation-2015
July 20-22, 2015

Volume 4 Issue 2

Page 62