Shrinkage Parameters for Each Explanatory Variable Found Via Particle Swarm Optimization in Ridge Regression

Published On: December 31, 2016 | Pages: 031 - 039

Author(s): Eren Bas*, Erol Egrioglu and Vedide Rezan Uslu

Ridge regression method is an improved method when the assumptions of independence of the explanatory variables cannot be achieved, which is also called multicollinearity problem, in regression analysis. ...

A Study of Global Numerical Maximization using Hybrid Chemical Reaction Algorithms

Published On: December 30, 2016 | Pages: 020 - 030

Author(s): Ransikarn Ngambusabongsopa1, Vincent Havyarimana2* and Zhiyong Li

Several approaches are proposed to solve global numerical optimization problems. Most of researchers have experimented the robustness of their algorithms by generating the result based on minimization aspect. ...

Leveraging Data Analytics by Transforming Relational Database Schema in to Big Data

Published On: December 30, 2016 | Pages: 012 - 017

Author(s): Mukhtar Ahmad and Zeeshan Siddiqui*

The growth of data and its efficient handling is becoming more popular trend in recent years bringing new challenges to
explore new avenues. Data analytics can be done more efficiently with the availability of distributed architecture of “Not
Only SQL” NoSQL databases.

Abstract View Full Article View DOI: 10.17352/tcsit.000002

Open Access Research Article PTZAID:TCSIT-1-101

**Optimizing the Cross Section of Cold-Rolled Steel Beams Using a Genetic Algorithm: Avoiding Local Optima Using Adaptive Mutation Control, Flexible Restriction Handling and Inbreed Avoiding Mating Strategies**

Published On: April 26, 2016 | Pages: 001 - 011

Author(s): Werner Baumgartner*, Florian Esterhammer, Christoph Wolf, Anna Theresia Stadler

In modern mechanical engineering and steelwork the use of cold-rolled steel sections is a standard method. These sections should be mechanically stable on the one hand and cost efficient on the other hand. To decide what profile suits for a certain case is a constrained optimization problem which is in general non convex, i.e. several local optima exist.

Abstract View Full Article View DOI: 10.17352/tcsit.000001

Review Article

Open Access Review Article PTZAID:TCSIT-1-103

**Squaring the Circle Using Modified Tartaglia Method**

Published On: December 30, 2016 | Pages: 018 - 019

Author(s): Mieczysaw Szyszkowicz*

The paper presents a modified Tartaglia method. Tartaglia proposed a simple approach to perform an approximate quadrature of the circle. His construction results with the number $\pi=3.125$. Using a similar construction as Tartaglia but with different proportions improves the accuracy of his method.

Abstract View Full Article View DOI: 10.17352/tcsit.000003