Workshop on Numerical Methods and Modeling/Simulations in computational Science and Engineering (NMMS 2010)

The Use of Shadow Regions in Multi Region FDM: High Precision Cylindrically Symmetric Electrostatics p. 1

Fast Forth Power and Its Application in Inversion Computation for a Special Class of Trinomials p. 14

Computational Study of Compressive Loading of Carbon Nanotubes p. 25

printf5d: A Five-Dimensional Automatic Cubature Routine Designed for a Multi-core Platform p. 44

Development of Quadruple Precision Arithmetic Toolbox QuPAT on Scilab p. 60

Agent Based Evacuation Model with car-Following Parameters by Means of Cellular Automata p. 71

A Cellular Automata Based Approach for Prediction of Hot Mudflow Disaster Area p. 87

Stochastic Optimization Approaches to Image Reconstruction in Electrical Impedance Tomography p. 99

Estimating Soil Parameters Using the Kernel Function p. 110


On the Possibilities of Multi-core Processor Use for Real-Time Forecast of Dangerous Convective Phenomena p. 130

Transformation, Reduction and Extrapolation Techniques for Feynman Loop Integrals p. 139

Workshop on PULSES V-Logical, Scientific and Computational Aspects of Pulse Phenomena in Transitions (PULSES 2010)

Application of Wavelet-Basis for solution of the Fredholm Type Integral Equations p. 155

Fractal Patterns in Prime Numbers Distribution p. 164

Efficient Energy Supply from Ground Coupled Heat Transfer source p. 177

A Study of Nonlinear Time-Varying Spectral Analysis Based on HHT, MODWPT and Multitaper Time-Frequency Reassignment p. 191

Performance Analysis of Greenhouses with Integrated Photovoltaic Modules p. 206

Modelling Cutaneous Senescence Process p. 215

Self-similar Hierarchical Regular Lattices p. 225

Workshop on Software Engineering Processes and Application (SEPA 2010)

Model Driven Software Development of Applications Based on Web Services p. 241

An Aspect-Oriented Approach for Mobile Embedded Software Modeling p. 257

Multi-variate Principal Component Analysis of Software Maintenance Effort Drivers p. 273

Process Model Based Incremental Project Planning p. 285

A Software Metric for Python Language p. 301

Certifying Algorithms for the Path Cover and Related Problems on Interval Graphs p. 314

Design and Overhead Estimation of Device Driver Process p. 324

Improvement of Gaze Estimation Robustness Using Pupil Knowledge p. 336
Workshop on WEB 2.0 and Social Networks (Web2.0 2010)

Behaviour-Based Web Spambot Detection by Utilising Action Time and Action Frequency p. 351

Towards the Definition of a Metamodel for the conceptual Specification of Web Applications Based on Social Networks p. 361

Semi-automatic Information Extraction from Discussion Boards with Applications for Anti-Spam Technology p. 370

Factors Involved in Estimating Cost of Email Spam p. 383

Spam 2.0: The Problem Ahead p. 400

General: Track on Information Systems and Technologies

Tag Recommendation for Flickr Using Web Browsing Behavior p. 412

USABAGILE_Web: A Web Agile Usability Approach for Web Site Design p. 422

Combining CSP and Constraint-Based Mining for Pattern Discovery p. 432

Experience in Developing an Open Source Scalable Software Infrastructure in Japan p. 448

A New Formal Test Method for Networked software Integration Testing p. 463

General Track on Computational Methods, Algorithms and Scientific Application

Automatic History Matching in Petroleum Reservoirs Using the TSVD Method p. 475

An Efficient Hardware Architecture from C Program with Memory Access to Hardware p. 488

A New Approach: Component-Based Multi-physics Coupling through CCA-LISI p. 503

Efficient Algorithms for the 2-Center Problems p. 519

A Genetic Algorithm for Integration Planning of Assembly Operation and Machine Layout p. 533

General Track on Advanced and Emerging Applications

Diagnosis of Learning Styles Based on Active/Reflective Dimension of Felder and Silverman's Learning Style Model in a Learning Management System p. 544

Exploring the State of the Art in Adaptive Distributed Learning Environments p. 556

Analysis of an Implicitly Restarted Simpler GMRES Variant of Augmented GMRES p. 570

On the Linearity of Cryptographic Sequence Generators p. 586

Author Index p. 597

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.