SESSION: MODELLING, SIMULATION AND OPTIMIZATION OF BIOLOGICAL SYSTEMS

Strategic Planning Of Identification Technologies In Healthcare Processes: A Model And A Real Case
Paolo Locatelli, Nicola Restifo, Roberta Facchini, Elena Sini, Michele Torresani

Mathematical Modeling and Simulation of Latency Phase HIV-1 Dynamics
Frank Nani, Mingxian Jin
A Pathway Based Model of Retinoid Dependent Growth Arrest and Differentiation

Shobha Gupta, T.K. Basak, S.K. Chaudhary

Global Optimization of Molecular Potential Energy Function Using a Real Coded Genetic Algorithm

Shashi Barak, Kusum Deep, Krishan Pratap Singh, Vinod Kumar Katiyar

A Model Reduction Technique for Stochastic Biochemical Kinetics

Silvana Ilie, Ekaterina Kudashkina

Modeling and Analyzing CIIP Medical System Using Colored Petri-Nets

Seyed Morteza Babamir, Mojdeh Rahmanian

Reconstruction of MHC Alleles by Cross Modeling and Structural Assessment

Cassiana Chassot Fulber, Dinler Amaral Antunes, Mauricio Menegatti Rigo, Jose Artur Bogo Chies, Marialva Sinigaglia, Gustavo Fioravanti Vieira

Design and Simulation of Optimal Control Systems Applied to COPD Patients

Jaime Rojas Sanchez, Jonathan Chaparro Sanchez, Jose Soriano

Computer Simulation for the Development of Immune Cells

Zizhong Wang, Huiqing Yang

A New Attempt to Stimulus Related Data Analysis by Structured Neural Networks

Bernd Bruckner, Tobias Walter

SESSION: COMPUTATIONAL METHODS, COMPUTER-ASSISTED MEDICAL CARE AND SERVICE SYSTEMS, AND DIAGNOSTIC TOOLS IN BIOMEDICAL Seizure Detection Using Sequential and Coincident Power Spectra with Deterministic Finite Automata

Rory A. Lewis, Andrew M. White

A Tool to Aid in the Diagnosis of Bipolar Disorder

Luciano Comin Nunes, Placido Rogerio Pinheiro, Tarcisio Cavalcante Pequeno, Mirian Caliope Dantas Pinheiro

A Tool to Aid in the Neuropsychological Diagnosis of Alzheimer's Disease

Ana Karoline Araujo de Castro, Plçcido Rogerio Pinheiro, Mirian Caliope Dantas Pinheiro

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From Celestial to Terrestrial: A New Light on David Kinnebrook's Systematic Error of Judgment at Greenwich in 1796
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Jason Gershman

Matrix Genetics and THE Bipolar Algebra of the Genetic Code
Matthew He, Sergei Petoukhov

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Comparing Robust Methods for Defining Directed Networks and Their Hub Nodes
Peter Langfelder, Tova Fuller, Steve Horvath

Identification of Gene Pathway Involved in Clinical Traits Using Bayesian Network Classifiers
Jiangeng Li, Yi Zhu, Xiaogang Ruan

Information-Theoretic Inference of Gene Networks Using Backward Elimination
Patrick Meyer, Daniel Marbach, Sushmita Roy, Manolis Kellis

Pathway-based Microarray Data Analysis for Cancer Research
Fei-Hung Hung, Hung-Wen Chiu

Latent Variables in Bayesian Network Construction and Inference
Jun Zhu, Manikandan Narayanan, Bin Zhang, Kai Wang

A Study of Genomic Modules and Intermodular Networks for Understanding the Operating System of Life
Hye Young Kim, Jin Hyuk Kim
A Novel Knowledge-driven Systems Biology Approach for Phenotype Prediction Upon Genetic Intervention
Rui Chang, Wei Wang

Network Inference by Considering Multiple Objectives: Insights from In Vivo Transcriptomic Data Generated by a Synthetic Network
Sandro Lambeck, Andreas Drager, Reinhard Guthke

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Reconstruction of Biological Networks Structure by Using Bayesian Network Models with a Two-step Learning Procedure
Baikang Pei, Dong-Guk Shin

Directional Equilibrium of Gene Regulatory Networks in Developmental Biology
Martin Ehler, Brian P. Brooks, Robert F. Bonner

Robust Stability Analysis and Design Under Consideration of Multiple Feedback Loops in the Tryptophan Regulatory Network of E. coli
Anke Meyer-Baese, Fabian Theis

Identification of Specific Gene Expression Signatures in Oncology
Gregor Stiglic, Igor Pernek, Peter Kokol

Proper Alignment of MS/MS Spectra from Unsequenced Species
Freddy Cliquet, Guillaume Fertin, Irena Rusu, Dominique Tessier

Non Destructive Sensing of Food Materials using Fuzzy c-means Clustering
Gugulethu Mabuza, Tarik AL-Ani, Karim Djouani, Johnson Agbinya

Interval-Censoring in Biomedical and Biopharmaceutical Clinical Trials
Ding-Geng Chen, Karl Peace, Lili Yu, Yuhlong Lio, Yibin Wang

A Tool Preference Selection Method for RNA Secondary Structure Prediction with SVM
Chiou-Yi Hor, Chang-Biau Yang, Chiou-Ting Tseng, Hung-Hsin Chen

Cell Assay Image Classification with Few Labeled Examples
Nicolas Cebron
SA-Motifbase: A Database of Protein Structural Alphabet Motifs
Shih-Yen Ku, Yuh-Jyh Hu

IT Services for Decision Support Systems on Public Health Problems by using Genomic Data
Juan Carlos Cuevas-Tello, Christian Alberto Garcia-Sepulveda, Hector G. Perez-Gonzalez, Manuel Mora

Three Dimensional Structure Modeling and Analysis of Ribulose 1,5-Bisphosphate Carboxylase of Hypericum Perforatum
Ashish Gupta, Anshika Malaviya, Sharada M Potukuchi, Jitendra Narayan

Spatially Indexing Sequences using Hashes
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Analysis of Hydrogenase Maturation Protease from Pyrococcus abyssi Through Homology Modeling
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MicroLabs for Human Sperm
Giuseppe Tritto, Xianghong Ma, Mark price

Parallel Hybrid Genetic Algorithm based Dynamic Load-Balancing for Mining of Molecular Fragments
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Graph Cut Based Active Contours and Statistical Shape Priors
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A Case Tool for Prediction of Squamousal Cancerous and Non-Cancerous Cells using DIP and ANN
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Application of W-curves and TSP to Clustering HIV-1 Sequences by Epitope
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Robust Stability Analysis of Multi-Time Scale Genetic Regulatory Networks under Parametric Uncertainties
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Communication Technologies Based on Brain Activity
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The Impact of Equally-Optimal Pairwise Alignments
Lukas Olson, Mark Clement, Quinn Snell

Infrared Tracking for Locomotion and Devices Control in Quadriplegic People
Mauricio Plaza Torres

Engineering Information Technology for Health in Emergency Management
Marcella Coccanari

The Beta Adrenergic Receptor: A Case Study in Modeling a G Protein Coupled Receptor in a Cell Biology Class
Margaret Goodman