# TABLE OF CONTENTS OF VOLUME 12, NUMBER 4

Logical Models of Composite Dynamic Objects Control ................................................................. 303
   Vitaly Velichko, Victor Gladun, Gleb Gladun, Anastasiya Godunova, Yuriy Ivaskiv, Elina Postol, Grigorii Jakemenko

The On-board Operative Advisory Expert Systems for Anthropocentric Object ....................................... 308
   Boris Fedunov

Defining Network Activity Patterns Using First Order Temporal Logics ............................................... 317
   Lubomir Stanchev

On the Error-Free Computation of Fast Cosine Transform ..................................................................... 321
   Vassil Dimitrov, Khan Wahid

Optimization of ATM Telecommunication Networks .............................................................................. 328
   Leonid Hulianytskyi, Andrii Baklan

Analyzing the Data in OLAP Data Cube .................................................................................................... 335
   Galina Bogdanova, Tsvetanka Georgieva

A Mathematical Apparatus for Domain Ontology Simulation. Logical Relationship Systems .................... 343
   Alexander Kleshchev, Irene Artemjeva

Grid-enabling Satellite Image Archive Prototype for UA Space Grid Testbed ........................................... 351
   Andrey Shelestov, Alexander Lobunets, Michael Korbakov

Representation of Neural Networks by Dynamical Systems ..................................................................... 358
   Volodymyr Donchenko, Denys Serbaev

Automata–based Method for Solving Systems of Linear Constraints in \( \{0,1\} \) ........................................ 362
   Sergey Krivoi, Lyudmila Matveyeva, Wioletta Grzywacz

Verbal Dialogue versus Written Dialogue .................................................................................................. 369
   David Burns, Richard Fallon, Phil Lewis, Vladimir Lovitskii, Stuart Owen

Learning Technology in Scheduling Based on the Mixed Graphs ............................................................. 378
   Yuri Sotskov, Nadezhda Sotskova, Leonid Rudoi

Robot Control Using Inductive, Deductive and Case Based Reasoning .................................................. 386
   Agris Nikitenko

Tables of Contents of IJ ITA – Volume 12 ............................................................................................... 396

Authors’ Index ............................................................................................................................................... 399

Table of Contents of Volume 12, Number 4 ............................................................................................... 400