

## TABLE OF CONTENTS

Design, Implementation, and Testing of a Miniature Self-Stabilizing Capsule Endoscope With Wireless Image Transmission Capabilities.

Dobromir Filip, Orly Yadid-Pecht, Christopher N. Andrews, and Martin P. Mintchev ..... 3

Evolving Cascade Neural Network Based on Multidimesnional Epanechnikov's Kernels and its Learning Algorithm  
Yevgeniy Bodyanskiy, Paul Grimm, Nataliya Teslenko ..... 25

Regions of Sufficiency for Metrical Data Retrieval

Vladimir Mashtalir, Konstantin Shcherbinin, Vladislav Shlyakhov, Elena Yegorova ..... 31

Method for Evaluating of Discrepancy Between Regularities Systems in Different Groups

Oleg Senko, Anna Kuznetsova, Natalia Malygina, Irina Kostomarova ..... 46

Evaluation of Greedy Algorithm of Constructing (0,1)-Matrices With Different Rows<sup>1</sup>

Hasmik Sahakyan, Levon Aslanyan ..... 55

Histology Image Segmentation

Francisco J. Cisneros, Paula Cordero, Alejandro Figueroa, Juan Castellanos ..... 67

Differential Evolution – Particle Swarm Optimization

Nuria Gómez Blas, Alberto Arteta, Luis F. de Mingo ..... 77

Computational Model for Serendipity

A. Anguera, M.A. Diaz, A. Gutierrez ..... 85

Two Approaches to One Optimization Problem in Recognition Theory

Nataliya Katerinochkina ..... 92

Table of Contents ..... 100