## **Table of Contents**

Comparison of Bio-Inspired and Graph-Theoretic Algorithms for Design of Fault-Tolerant Networks Matthias Becker, Waraphan Sarasureeporn, and Helena Szczerbicka	1
A Technique for Measuring the Level of Autonomicity of Self-managing Systems  Thaddeus Eze, Richard Anthony, Alan Soper, and Chris Walshaw	8
A Framework to Create multi-domains Autonomic Middleware  Mahdi Ben Alaya, Thierry Monteil, Khalil Drira, and Tom Guerout	14
State-Space Feedback Control for Elastic Distributed Storage in a Cloud Environment M. Amir Moulavi, Ahmad Al-Shishtawy, and Vladimir Vlassov	18
Towards Autonomic Marketing Carl Adams, Richard John Anthony, Wendy Powley, David Bell, Chris White, and Chun Wu	28
A Dynamic Load Balancing Model Based on Negative Feedback and Exponential Smoothing Estimation Di Yuan, Shuai Wang, and Xinya Sun	32
Interactive Rendering of Huge 3D Meshes in Cloud Computing Daeyoung Kim and Haeyoung Lee	38
Fault Tolerant Approaches in Cloud Computing Infrastructures  Alain Tchana, Laurent Broto, and Daniel Hagimont	42
BtrScript: A Safe Management System for Virtualized Data Center Remy Pottier and Jean-Marc Menaud	49
RFDMon: A Real-time and Fault-tolerant Distributed System Monitoring Approach Rajat Mehrotra, Abhishek Dubey, Sherif Abdelwahed, and Krisa W. Rowland	57
Online Spectrum-based Fault Localization for Health Monitoring and Fault Recovery of Self-Adaptive Systems Eric Piel, Alberto Gonzalez-Sanchez, Hans-Gerhard Gross, Arjan J.C. van Gemund, and Rui Abreu	64
Augmenting Reinforcement Learning Feedback with Prediction for Autonomic Management Khandakar Rashed Ahmed, Raphael Bahati, and Michael Bauer	74
Autonomic Computing in the First Decade: Trends and Direction Thaddeus Eze, Richard Anthony, Chris Walshaw, and Alan Soper	80
A Deliberative Reasoner for Model-Based Software Health Management	86

Abhishek Dubey, Nagabhushan Mahadevan, and Gabor Karsai	
Efficient Alignment of Aerial Images Based on Virtual Forces Claudius Stern, Christoph Rasche, Lisa Kleinjohann, and Bernd Kleinjohann	93
Coordinating Energy-aware Administration Loops Using Discrete Control Soguy Mak Kare Gueye, Noel De Palma, and Eric Rutten	99
Action Learning with Reactive Answer Set Programming: Preliminary Report  Michal Certicky	107
Development and Evaluation of a Self-Adaptive Organic Middleware for Highly Dependable System-on-Chips Benjamin Betting, Mathias Pacher, and Uwe Brinkschulte	112
FUZZBUSTER: A System for Self-Adaptive Immunity from Cyber Threats  David Musliner, Jeffrey Rye, Dan Thomsen, David McDonald, Mark Burstein, and Paul Robertson	118