

# Contents

## Part I Software Engineering

<b>Non-functional Property Aware Brokerage Approach for Cloud Service Discovery</b> . . . . .	3
Adrija Bhattacharya and Sankhayan Choudhury	
<b>A DWT-based Digital Watermarking Scheme for Image Tamper Detection, Localization, and Restoration.</b> . . . . .	17
Sukalyan Som, Sarbani Palit, Kashinath Dey, Dipabali Sarkar, Jayeeta Sarkar and Kheyali Sarkar	
<b>Service Insurance: A New Approach in Cloud Brokerage</b> . . . . .	39
Adrija Bhattacharya and Sankhayan Choudhury	
<b>Using Semiformal and Formal Methods in Software Design: An Integrated Approach for Intelligent Learning Management System</b> . . . . .	53
Souvik Sengupta and Ranjan Dasgupta	
<b>A Lightweight Implementation of Obstruction-Free Software Transactional Memory</b> . . . . .	67
Ankita Saha, Atrayee Chatterjee, Nabanita Pal, Ammlan Ghosh and Nabendu Chaki	

## Part II Cryptography

<b>Multiplicative Polynomial Inverse Over <math>GF(7^3)</math>: Crisis of EEA and Its Solution.</b> . . . . .	87
J.K.M. Sadique Uz Zaman and Ranjan Ghosh	

<b>A Novel Biometric Template Encryption Scheme Using Sudoku Puzzle . . . . .</b>	<b>109</b>
Arnab Kumar Maji and Rajat Kumar Pal	
 <b>Part III Computer Aided Design</b>	
<b>An ESOP-Based Reversible Circuit Synthesis Flow Using Simulated Annealing . . . . .</b>	<b>131</b>
Kamalika Datta, Alhaad Gokhale, Indranil Sengupta and Hafizur Rahaman	
<b>An Efficient Algorithm for Reducing Wire Length in Three-Layer Channel Routing . . . . .</b>	<b>145</b>
Swagata Saha Sau and Rajat Kumar Pal	
<b>A New Move Toward Parallel Assay Operations in a Restricted Sized Chip in Digital Microfluidics. . . . .</b>	<b>157</b>
Debasis Dhal, Arpan Chakrabarty, Piyali Datta and Rajat Kumar Pal	
<b>A 2D Guard Zone Computation Algorithm for Reassignment of Subcircuits to Minimize the Overall Chip Area . . . . .</b>	<b>183</b>
Ranjan Mehera, Arpan Chakrabarty, Piyali Datta and Rajat Kumar Pal	
<b>Author Index . . . . .</b>	<b>211</b>

Applied Computation and Security Systems

Volume Two

Chaki, R.; Saeed, K.; Choudhury, S.; Chaki, N. (Eds.)

2015, X, 211 p. 93 illus., Softcover

ISBN: 978-81-322-1987-3