PAPERS

Artificial Intelligence
New Results and Techniques in Resolution Theory ........................................ L. Yelowitz and A. Kandel 673

Automata Theory
A Note on the Linear Space Automata Stability Problem ......................... K. Sugino, Y. Inagaki, and T. Fukumura 678

Combinational Theory
A Numerical Expansion Technique and Its Application to Minimal Multiplexer Logic Circuits .................. T. F. Tabloski and F. J. Mowle 684

Image Processing
The Matrix Transform Processor ............................................................... J. J. Capowski 703

Operating Systems
Aspects of a Dynamically Adaptive Operating System .......................... P. R. Blevins and C. V. Ramamoorthy 713

Pattern Recognition
Representation of Random Waveforms by Relational Trees ....................... R. W. Ehrich and J. P. Foith 725

Replacement Algorithms
Some Results on Distribution-Free Analysis of Paging Algorithms ............... O. I. Aven, L. B. Boguslavsky, and Y. A. Kogan 737

threshold Logic Design
Statistical Analysis of a Differential Threshold Logic Circuit Configuration .......... C. R. Baugh and B. A. Wooley 745

CORRESPONDENCE

Error Analysis of Two-Dimensional Recursive Digital Filters Employing Floating-Point Arithmetic ......................... M.-D. Ni and J. K. Aggarwal 755

On Input and Next-State Equations of the R-S Type M-Stable ...................... J. I. Acha and J. L. Huertas 759

A Simple Technique for Partial Elimination of Unit Productions from LR(k) Parsers .................................................. M. L. Joliat 763

A Storage Efficient Way to Implement the Discrete Cosine Transform ............. R. M. Haralick 764

Comments on “The Application of the Rademacher-Walsh Transform to Boolean Function Classification and Threshold Logic Synthesis” ................................................. C.-K. Yuen 766

Author’s Reply .................................................................................. C. R. Edwards 767

Further Comments on “Closure Partition Method for Minimizing Incomplete Sequential Machines” .................... C. V. S. Rao and N. N. Biswas 767