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Preface

The focus of the Asian Applied Computing Conference (AACC) is primarily to bring the research in computer science closer to practical applications. The conference is aimed primarily at topics that have immediate practical benefits. By hosting the conference in the developing nations in Asia we aim to provide a forum for engaging both the academic and the commercial sectors in that region. The first conference “Information Technology Prospects and Challenges” was held in May 2003 in Kathmandu, Nepal. This year the conference name was changed to “Asian Applied Computing Conference” to reflect both the regional- and the application-oriented nature of the conference.

AACC is planned to be a themed conference with a primary focus on a small set of topics although other relevant applied topics will be considered. The theme in AACC 2004 was on the following topics: systems and architectures, mobile and ubiquitous computing, soft computing, man machine interfaces, and innovative applications for the developing world.

AACC 2004 attracted 184 paper submissions from around the world, making the reviewing and the selection process tough and time consuming. The selected papers covered a wide range of topics: genetic algorithms and soft computing; scheduling, optimization and constraint solving; neural networks and support vector machines; natural language processing and information retrieval; speech and signal processing; networks and mobile computing; parallel, grid and high-performance computing; innovative applications for the developing world; cryptography and security; and machine learning. Papers were primarily judged on originality, presentation, relevance and quality of work. Papers that had clearly demonstrated results were given preference.

AACC 2004 not only consisted of the technical program covered in this proceedings but also included a workshop program, a tutorial program, and demo sessions. Special thanks are due to the general chair, Lalit Patnaik for the overall organization of the conference both in 2003 and 2004. Thanks are due to the tutorial chair Rajeev Kumar for looking after the tutorial program. The conference would not have been possible without the local organization efforts of Deepak Bhattarai and Sudan Jha. Thanks are due to Thimal Jayasooriya for help with the proofreading.

We would like to thank the program committee members for their efforts, and our reviewers for completing a big reviewing task in a short amount of time. Finally, we would like to thank all the authors who submitted papers to AACC 2004 and made possible a high-quality technical programme.

August, 2004

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# Table of Contents

## Machine Learning and Soft Computing

- **Effective Evolutionary Multimodal Optimization by Multiobjective Reformulation Without Explicit Niching/Sharing**  
  R. Kumar and P. Rockett  
  1

- **Development of Genetic Algorithm Embedded KNN for Fingerprint Recognition**  
  H.R.S. Reddy and N.V.S. Reddy  
  9

- **Genetic IMM\_NN Based Tracking of Multiple Point Targets in Infrared Image Sequence**  
  M.A. Zaveri, S.N. Merchant, and U.B. Desai  
  17

- **Finding the Natural Groupings in a Data Set Using Genetic Algorithms**  
  N. Chowdhury and P. Jana  
  26

- **Volumetric Measurement of Heart Using PA and Lateral View of Chest Radiograph**  
  I.C. Mehta, Z.J. Khan, and R.R. Khotpal  
  34

- **On the Optimization of Fuzzy Relation Equations with Continuous t-Norm and with Linear Objective Function**  
  D. Pandey  
  41

- **Progressive Boosting for Classifier Committee Learning**  
  52

## Scheduling, Optimisation and Constraint Solving

- **Parallel SAT Solving with Microcontrollers**  
  T. Schubert and B. Becker  
  59

- **Flow Shop Scheduling with Late Work Criterion – Choosing the Best Solution Strategy**  
  J. Blazewicz, E. Pesch, M. Sterna, and F. Werner  
  68

- **GA-Based Multiple Route Selection for Car Navigation**  
  B. Chakraborty  
  76

- **Genetic Algorithm for Airline Crew Scheduling Problem Using Cost-Based Uniform Crossover**  
  K. Kotecha, G. Sanghani, and N. Gambhava  
  84
Neural Networks and SVMs

Neural Network and Wavelets in Arrhythmia Classification .......................... 92
V. Jain and J.S. Sahambi

ECG Arrhythmia Analysis by Multicategory Support Vector Machine ............ 100
M.S. Khadtare and J.S. Sahambi

Approximation of Multi-pattern to Single-Pattern Functions
by Combining FeedForward Neural Networks and Support Vector Machines ... 108
V.H. Pakka

Comparison of Numerical Integration Algorithms in Raster CNN Simulation ...... 115
V. Murgesh and K. Murugesan

Natural Language Processing and Information Retrieval

Morphological Analyzer for Manipuri: Design and Implementation ............... 123
S.I. Choudhury, L.S. Singh, S. Borgohain, and P.K. Das

Using Selectional Restrictions for Real Word Error Correction .................. 130
R.S.D. Wahida Banu and R. Sathish Kumar

Mining Top – k Ranked Webpages Using Simulated Annealing
and Genetic Algorithms ............................................................... 137
P. Deepa Shenoy, K.G. Srinivasa, A.O. Thomas, K.R. Venugopal,
and L.M. Patnaik

Using Document Dimensions for Enhanced Information Retrieval ............. 145
T. Jayasooriya and S. Manandhar

Speech and Signal Processing

Effect of Phonetic Modeling on Manipuri Digit Recognition Systems
Using CDHMMs ................................................................. 153
S.I. Choudhury and P.K. Das

Building Language Models for Tamil Speech Recognition System ............. 161
S. Saraswathi and T.V. Geetha

Implementation of Tamil Speech Recognition System Using Neural Networks .. 169
S. Saraswathi and T.V. Geetha

Introducing Pitch Modification in Residual Excited LPC
Based Tamil Text-to-Speech Synthesis ........................................... 177
M.V. Krithiga and T.V. Geetha

Separation Performance of ICA Algorithms
on FECG and MECG Signals Contaminated by Noise .......................... 184
S.D. Parmar, H.K. Patel, and J.S. Sahambi
Networks and Mobile Computing

Evaluation of BER/PER Performance of a FLAMINGO Network .......................... 191
S.P. Majumder and S. Dey

Fault Tolerance Studies for Wormhole Routing
in Multiconnected Double-Loop Networks .................................................. 198
R. Vasappanavara, S. Kandula, and N. Chalamaiah

Applications and Parallel Implementations of Metaheuristics
in Network Design and Routing ................................................................. 205
S.L. Martins, C.C. Ribeiro, and I. Rosseti

Comparison of Integrated Micro and Macro Mobility Protocols .......................... 214
D. Saraswady, V. Sai Prithiv, and S. Shanmugavel

Genetic Algorithm Based Optimization for Location Update and Paging
in Mobile Networks ...................................................................................... 222
A. Chandra and K. Mal

Parallel, Grid and High Performance Computing

Global Backfilling Scheduling in Multiclusters .............................................. 232
J. Yue

Computation of Ternary Covering Arrays Using a Grid .................................. 240
J. Torres-Jimenez, C. De Alfonso, and V. Hernández

Impact of Algorithm Design
in Implementing Real-Time Active Control Systems .................................... 247
M.A. Hossain, M.O. Tokhi, and K.P. Dahal

An Efficient Technique for Dynamic Slicing of Concurrent Java Programs .... 255
D.P. Mohapatra, R. Mall, and R. Kumar

A Simple Delay Testable Synthesis of Symmetric Functions ......................... 263
H. Rahaman and D.K. Das

Innovative Applications for the Developing World

VOBA – A Voice Based Newsgroup ............................................................. 271
U.B. Desai, N. Balachander, P. Dinakar, and V. Madhavan

An ICT Based Framework for Improving Rural Credit Delivery .................... 279
S.S. Satchidananda and S. Srinivasa

An Approach Towards a Decentralised Disaster Management
Information Network ..................................................................................... 287
M. Scalem, S. Bandyopadhyay, and A.K. Sircar
A Web-Based Examination System in the Context of Bangladesh ............ 296
S. Dey and S. Mahmud

Cryptography and Security

Trust and Security Realization for Mobile Users in GSM Cellular Networks .... 302
J. Venkatraman, V. Raghavan, D. Das, and A.K. Talukder

A Software Agent Based Approach for Fraud Detection in Network Crimes .... 310
M.R. Patra and B.B. Jayasingh

An Ontology for Network Security Attacks ............................................ 317
A. Simmonds, P. Sandilands, and L. van Ekert

Ensuring e-Security Using a Private-Key Cryptographic System
Following Recursive Positional Modulo-2 Substitutions ......................... 324
S. Dutta and J.K. Mandal

Author Index ................................................................. 333