

Introduction to the Inaugural Issue

In this inaugural issue, we present a variety of papers to cover, as much as possible, the breadth and depth of the intended scope of JAIT. We begin with a survey paper by Khan *et al.* on machine learning techniques for text document classification. With a proliferation of electronic documents on the web and elsewhere, it is increasingly important to be able to classify such e-documents for proper management. Their paper presents a timely review on some of the more prominent theories and methods of document classification and text mining for e-documents.

The second paper by Kumar and Vig presents a focused crawler that is enhanced by ontological rules. So-called focused crawlers have been developed primarily to seek and process relatively “untouched” web contents, such as some non-English documents that are not indexed by mainstream crawlers. The proposed focused crawler is intended for multilingual applications and the authors have applied their proposed crawler to mixed English and Hindi contents.

Online Analytical Processing (OLAP) is an important approach for mining multidimensional data. It has found widespread business applications, for instance, in decision support. In their paper entitled “Integrated Performance and Visualization Enhancements of OLAP Using Growing Self Organizing Neural Networks”, the authors present a novel architecture that reportedly can offer significant improvements over previous methods.

Online social networks have revolutionized the way people interact. In the next paper, Lai *et al.* present a social network that is enhanced with a face recognition and tagging feature. They also discuss the issues involved in designing and implementing such a system. Their paper therefore lays the groundwork for further developments in the drive towards enhancing the users’ experience of such online networks.

In the paper that follows, the authors introduce a dynamic differential evolution (D-DE) algorithm to solve constrained optimization problems. Three major improvements over the prior art have been reported, and the authors have performed experiments using six benchmark functions to substantiate their claim.

The last two papers underscore the wider applications of computing and information technology to the industry. The paper authored by Narmadha and Thyagarajan presents a multi level inverter fed Permanent Magnet Brushless DC Motor (PMBLDCM) with a simplified voltage control technique based on fuzzy logic. Sensing is through “indirect position sensing,” which is justified by the observation that position sensing came indirectly from voltage and current waveforms. Experiments and simulations conducted by the authors demonstrate the advantages of their approach.

In the final paper, the authors present an analysis of a fixed Worldwide Interoperability for Microwave Access (WiMAX) system that has the potential to provide a low cost solution for integrated multimedia access networks with a wide bandwidth. This makes it particularly suitable for telemedicine applications. They have presented results on comparing the distribution of video data using two modulation schemes, and have estimated the bandwidth utilization for continuous data transmission in remote patient monitoring applications.

We hope you will enjoy reading the papers published in this inaugural issue and find its contents to be very valuable.

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Editor-in-Chief
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