Editorial

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It is a matter of great privilege for me to unveil before you the twenty-second issue i.e. Volume 10 Number 02 of the “International Journal of Information Technology” [An official Journal of Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi] with acronym BJIT. The issue is live on the Springer content platform SpringerLink and available to the prospective readers through Springer CS package globally.

Throughout the world, nations have started recognizing that Information Technology (IT) is now acting as a catalyst in speeding up the economic activities in efficient governance, citizens' empowerment, sustainable development and in improving the quality of human life. Recent advancements in IT have touched almost every conceivable area of human life. Its degree of pervasiveness, in day to day life, is rapidly increasing, every new day. On the backdrop of this, BJIT has accepted the challenge to consistently showcase, disseminate and institutionalize the rapidly changing huge knowledgebase globally, with authenticity and accuracy, having special focus on the new researches pertaining to IT applications for improving the quality of day to day life.

Volume 10 Number 02 presents a compilation of fourteen papers, chosen out of over 400 manuscripts, that span a broad variety of topics from various emerging areas of Information Technology and Computer Science, especially addressing current research problems related to decision making in multi-agent systems, software cost estimation, data network virtualization, genetic algorithms, privacy in

Internet of Things and Sign language based e-Learning to name a few.

To enable users reliably access the vast amount of multimedia data and related services on the web. The first manuscript in this issue “Behavior Study of SIP on IP Multimedia Subsystem Architecture MPLS as Transport Layer”, Faycal Bensalah et al. analyzes the performance of the SIP protocols in an IMS framework with the MPLS protocol at the transport layer. To aid relief operations during natural disaster, the second manuscript “Detection of Natural Disaster Affected Areas using R”, Sangameswar Venkata Mandavilli et al. utilizes geoparsing for identification of natural disaster affected places through an R-based system. With epidemic growth of information on the web, its timely availability to the user is of prime concern. The next manuscript “Context Aware Personalized Content Recommendation Using Ontology based Spreading Activation”, Kapil Sharma et al. proposes a novel context aware personalized content recommendation system based on an Ontology-based Spreading activation algorithm. Securing images through different watermarking schemes is no longer a secure option as earlier. The manuscript “A Block Based Watermarking Approach for Color Images using Discrete Wavelet Transformation”, Kaiser J. Giri et al. suggests a novel block based blind color image watermarking scheme using Discrete Wavelet Transformation (DWT). Choice and selection of reliable multicast routes in MANETs has been a grave issue. The manuscript “Multi-constraints Reliable Multicast Routing Protocol for Group Communications in MANETs”, Sujata V. Mallapur et al. puts forward a multi-constrained reliable multicast routing protocol (MRMRP) utilizing network coding to build reliable multicast path between source and receivers. The manuscript “A New Insight into the Schema Survival after Crossover and Mutation for Genetic

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Algorithms having Distributed Population Set”, Apoorva Mishra et al. extends the conventional schema theory on genetic algorithm with distributed population set. The manuscript “Switch Hierarchical Provider (SHP) Networks for Data Network Virtualization”, Vijayalakshmi Kakulapati et al. recommends a Switch Hierarchical Provider (SHP) Network, for data network virtualization across different platforms. Software Cost Estimation is an imperative criterion for assessing the quality of software. The manuscript “Neuro Fuzzy-COCOMO II Model for Software Cost Estimation”, Ishleen Kaur et al. recommends a hybrid approach amalgamating parametric and non-parametric models through neuro-fuzzy membership functions for efficient cost estimation. The manuscript “Preserving Privacy in Internet of Things-A Survey”, Adnan Ahmed Abi Sen et al. evaluates varied security and privacy issues arising from anytime, anywhere access of data. Cooperative Learning in Multi-agent systems has proved to be more efficient and faster. The manuscript “Improved Decision Making in Multiagent System for Diagnostic Application using Cooperative Learning Algorithms”, Deepak Annasaheb Vidhate et al. presents a novel amalgamated approach for reinforcement learning especially for diagnostic applications. The manuscript “Classification of Protein KINASE B using Discrete Wavelet Transform”, Shruti Jain recommends a CAD system for classification of Protein Kinase B through a Discrete Wavelet Transform (DWT) based classifier. Data plays a decisive role in most human doings. The manuscript “Comprehensive Survey on Data Warehousing Research”, Manoj Kumar Gupta et al. surveys the notable works in the field of data warehousing while highlighting significant challenges and laying important research directions. The manuscript “Sign Language e-Learning System for Hearing –Impaired Community of Pakistan”, Amirita Dewani et al. proposes an e-learning as well as text translation system for the hearing impaired community of Pakistan. The last manuscript, “Prediction of Alcohol Abused Individuals using Artificial Neural Network”, Divya Kumari et al. formulates an Artificial Neural Network based approach for alcohol abused individual identification.

This issue is an amalgamation of novel trends and technologies in domains like Artificial Neural Networks, Internet of Things (IoT), Image Watermarking, Software

Cost Estimation, Protein Classification, Recommender System, etc., to name a few. I am sure, these contributions will definitely enrich our knowledgebase, our readers shall enjoy reading the research showcased in this issue and motivate many of us to take up these challenging application areas and contribute effectively for the overall prosperity of the mankind.

As a matter of policy, all the manuscripts received and considered for the Journal, are double blind peer reviewed by at-least two independent referees. Our panel of expert referees posses a sound academic background and have a rich publication record in various prestigious journals representing Universities, Research Laboratories and other Institutions of repute, globally. Finalizing the constitution of the panel of referees, for double blind peer review(s) of the considered manuscripts, was a painstaking process, but it helped us to ensure that only the best, interesting and novel of the considered manuscripts are showcased and that too after undergoing multiple cycles of review, as required.

I wish to express my sincere gratitude to the entire editorial board, members of the resident editorial team and our panel of experts in steering the considered manuscripts through multiple cycles of review and bringing out the best from the contributing authors. I thank my esteemed authors for having shown confidence in BJIT and considering it a platform to showcase and share their original research work. I would also wish to thank the authors whose papers could not have been published in this issue of the Journal, probably because of the minor shortcomings. However, I would like to encourage them to actively contribute for the forthcoming issues.

I will fail in my duty, if I do not thank the members of the team from the Springer, particularly Ms. Suvira Srivastav, Ms. Julia Dilger, Ms. Rekha Rajkumar and Ms. Nidhi Chandok from Springer for their constant support in realizing the issue and presenting it before you.

The undertaken Quality Assurance Process involved a series of well defined activities that, I hope, went a long way in ensuring the quality of the publication. Still, there is always a scope for improvement, and so, I request the contributors and readers to kindly mail me their criticism, suggestions and feedback at bjit@bvicam.ac.in and help in further enhancing the quality of forthcoming issues.