

Guest Editorial Preface

Special Issue on Studies on Computer Sciences Research “SCSR”

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This issue covers recent studies on computer sciences SCSR and is essential reading for all researchers involved in computer science. The authors are solicited to contribute by submitting articles that illustrate research results, projects, survey works and industrial experiences that describe significant advances in computer science areas. This special issue presents a collection of research articles that report the latest research advances in the field of computer science.

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In this regard, the first article present are presenting the POS Tagger for Marathi Language. The POS tagging consists of three stages: Tokenization, Stemming and Morphological Analysis. a POS Tagger for Marathi language using Rule based technique is presented. The proposed system which tokenizes the string into tokens, find root word using morphological analyzer and compare the root word with the WordNet to assign appropriate tag. If word has assigned more than one tag, then by using Marathi grammar rules ambiguity is removed. Meaningful rules are provided to improve the performance of the system.

In the second article, a solution to the problem of perturbation in the urban transport network has been proposed. This solution is based on the multicriteria decision support method, which is an efficient way of identifying appropriate solutions to different perturbations situations. The proposed model should provide synthesis, evaluation and updating of available information in order to facilitate the task of the network monitoring operator. To achieve this objective, the authors propose a formal modeling of the perturbation concept through an effective and above all significant decision support system exploiting the diversity of the criteria as well as the decision maker's subjectivity. This modeling makes it possible to capitalize the knowledge available within a checkpoint and to monitor the process

The third article carries out an exhaustive survey of health care issues and improved solutions in automated systems using Big Data Analytics, IoT and Smart Applications in smart city context. This approach provides security assurance using soft computing techniques for implementing improved driving control and safety features with an integrated approach of solving general traffic related issues during any ambulance travelling in a high-volume traffic gateway. Nano robots are used in this system which work collaboratively as agents in the proposed swarm intelligence-based approach. Simulation results show that it has an improved rate of secured service and better security solution of health care as it uses advanced technology of automating vehicles in VANET, big data analytics and swarm intelligence

The fourth article presented a new approach for instance selection. It is based on the MVO metaheuristic. It takes advantage of the exploitation, exploration and local search of this algorithm to resolve the problem of instance selection. The study was performed with the 1NN classifier on 31 datasets. The comparison between the proposed approach and ADR-miner method proposed in the literature proves the efficiency of MVOIS in terms of accuracy and the number of selected instances. To reduce more the dataset, another vertical selection was performed, which consists of feature selection, applied on the original datasets (FS) and instances selected datasets (ISFS), followed with the reverse process (FSIS).

The last article proposes a multi-objective ACO algorithm is proposed to solve the daily carpooling problem. In particular, a set of decision variables are proposed in order to minimize three objective functions subject to a set of constraints on these objectives.

CONCLUSION

Computer science is currently highly recommended in different areas as a main tool to do daily tasks. In addition to processing speed and memory, it also helps us to make decisions, plan our day, and translate our texts or detect opinions of customer to improve the earnings of the company.

We hope have more collaboration with each other and need each other's help beyond time and space and across the boundaries of countries, cultures, and even generations.