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The content of this issue of JITA consists of six papers. The first paper, entitled “Use of computer search algorithms in the research of statistical, semantic and contextual rules of language in digital information space” by Z. Avramovic, D. Marinkovic, I. Lastric Igor, and G. Radic, presents the results of researching the interdependence between information technology and linguistics in the modern information society. The aim of this paper is to extend knowledge about the possibilities of application of information technologies in researching rules of language, as well as emphasizing the importance that language technologies have in the field of linguistic research, preservation of language and culture and national identity.

The next paper is “Space Complexity Analysis of the Binary Tree Roll Algorithm” by A. Božinovski et al. This paper presents the space complexity analysis of the binary tree roll algorithm. The space complexity is analyzed theoretically and the results are then confirmed empirically. The space complexity is shown, both theoretically and empirically, to be logarithmic in the best case and linear in the worst case, whereas its average case is shown to be dominantly logarithmic.

The third article “The use of digital signature in electronic communication in BiH - Research” by T. Talić describes the results of usage of digital signature in Internet communication, having in mind that the increasing use of electronic mail for identity theft and unsolicited marketing reduced the credibility of email as a communication tool. Authentication of the sender is well known defense against such attacks and one of the methods to ensure secure communication via e-mail is the use of digital signature.

In the paper “Expert systems in a cloud computing environment model for fast-paced decision making”, M. Bakator and D. Radosav outline the use of cloud computing technologies in expert systems implementation. The proposed cloud-based expert system offers effective, fast and reliable support for individuals or organizations when it comes to fast-paced decision making.

“Modeling the process of IS auditing in the public administration using UML diagrams” by D. Drljača, B. Latinović, and D. Starčević proposes a model for auditing of information systems in the public administration institutions. The model intends to explain the audit process using a visual representation of the process with UML diagrams.

The last article in this issue “Comparison of perceived interactivity measures of actual websites interactivity” by V. Štavljanin and M. Jevremović, investigates the importance of the interactivity for digital marketing. Paper reports a study in which two websites of low and high interactivity were developed and in an experimental setting as stimuli used to test three perceived interactivity measures. Results show that all measures estimated perceived interactivity of a high interactivity website better than of a low interactivity website.

On behalf of the Editorial Board we would like to thank the authors for their high-quality contributions, and also the reviewers for the effort and time invested into the preparation of this issue of the Journal of Information Technology and Applications.