

# PRIMENA I TRENDОВI INFORMACIONIH TEHNOLOGIJA

## APPLICATION AND TRENDS IN INFORMATION TECHNOLOGY

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### Rezime

Nauka i tehnologija su bile i ostale nezaobilazna dimenzija kvaliteta života (objektivnog i subjektivnog). I u budućnosti će to biti dominantna koja treba da obezbedi najviše standarde življenja i trajni napredak ljudske civilizacije. U skladu sa promenama menjaće se i filozofija življenja, a time i kvalitet života. Sa napretkom novih tehnologija i uvođenjem interaktivnih sistema, povećali su se zahtevi za što prirodnijom komunikacijom čovek-mašina, odnosno čovek-računar, onako kako ljudi međusobno komuniciraju. Upravo je komunikacija između korisnika i računara usko grlo u poboljšavanju iskoristivosti interaktivnih sistema, a ne samo puko izvođenje nekog zadatka. Problem komunikacije između korisnika i računara može se posmatrati kao odnos dva moćna informacijska procesora (računarski i ljudski) koji pokušavaju da komuniciraju preko vrlo „uske“ veze, te su nam potrebni sve brži i prirodniji načini međusobne razmene informacija, jer, konačno, naše odluke zavise od pravovremenog obezbeđivanja tačnih informacija. Samo neki od trendova internet tehnologija koje će zauzeti mesto u svakodnevici, a o kojima će biti reči u radu su: internet predmeta, cloud computing, personal cloud, in-memory computing, 3D skeniranje i 3D bio-štampanje, HTML5, prepoznavanje emocija u govoru, kućni monitoring zdravlja, masivne baze podataka, roboti koji izgledaju i ponašaju se kao ljudi i itd.

**Ključne reči:** nove tehnologije, interakcija čovek-računar, trendovi tehnologija, ciklus razvoja novih tehnologija, primena informacionih tehnologija

### Summary

Science and technology were and still are the most important dimension of life quality (objective and subjective). In the future they will be dominant, which should provide the highest standards of living and continuous progress of human civilization. As the changes occur, the philosophy of life will change too, and thus the quality of life. With the progress of new technologies and

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introduction of interactive systems, will increased demands for more natural human-machine communication, ie. human-computer, the way people communicate with each other. Communication between the user and the computer is bottleneck in improving the usability of interactive systems, and not merely performing a task. The problem of communication between the user and the computer can be seen as a relationship between two powerful information processors (computer and human) that are trying to communicate through a very "tight" connection, and we need faster and more natural way of mutual information exchange, because, ultimately, our decision depends on the provision of accurate information. Just a few of the trends in internet technology that will take place in everyday life, about which will be discussed in this paper are: internet of things, cloud computing, personal cloud, in-memory computing, 3D scanning and 3D bio-printing, HTML5, recognition of emotions in speech, home health monitoring, strategic big data, robots that look and act like people and so on.

**Keywords:** new technologies, human-computer interaction, technology trends, hype cycle for emerging technologies, application of information technology

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