Development of OWL model for Smart-system of distance learning of visually impaired people

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Abstract

The article discusses the use of language OWL (Web Ontology Language) for creation of the combined ontological model of Smart-system of distance learning of visually impaired people to the editor of ontologies Protégé. Development of intellectual systems of distance learning by means of ontological approach is an actual problem. At creation of Smart-system intelligence techniques as neural networks, fuzzy and neuro-fuzzy logic were used.

Keywords: distance learning, visually impaired people, ontological approach, OWL-model.

1 Introduction

In last years in the construction of distance learning systems (DL) intelligence methods are actively used [1], and also ontological approach is widely used. In work [2] the technology of the description of process of learning is presented in the form of ontological models and applications of received results for solution of problem of management of educational activity. In article [3] creation of ontological model on the basis of artificial intelligence and expert systems is offered.

Development of intelligent systems of DL people with disabilities, including the visually impaired people is actual.

2 The aim of research

The aim of research is development of Smart – system of distance learning for visually impaired people on the basis of ontological approaches.

The combined OWL model of DL of visually impaired people of the model consists of the learner, learning and joint use laboratory are constructed in the ontology editor Protégé. The proposed model [4, 5] are complementary and interrelated. This combined model allows to deeper analysis of numerous connections between ontological models and take account them software development. The multi-dimensional data processing is implemented based on intelligent methods: neural networks, fuzzy and neuro-fuzzy logic in Smart-system of DL.

3 Conclusions

Thus, the proposed Smart - system of distance learning for visually impaired people based on combined OWL model allows to structure input and output data, takes into account the feature functioning of the software for visually impaired people.

Acknowledgement

This work is carried out on the grant "Development of the Information Technology, Algorithms and Software and Hardware for Intelligent Control Systems for Complex Objects under Conditions of Parameter Uncertainty" (2015-2017) at the Institute of Information and Computational Technologies.

References

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