# Preface
## (Prefacio)

This volume of the journal "Research in Computing Science" contains selected papers on the two topics related to the field of humanities: computational linguistics/natural language processing and intelligent learning environments. The papers were carefully chosen by the editorial board on the basis of the at least two reviews by the members of the reviewing committee.

Both topics intend to model various cognitive abilities of the human beings: computational linguistics models the usage of natural language, while intelligent learning environment draws attention to the learning processes. In both cases the question is: how computers can manage these very complex human activities.

In case of computational linguistics at its modern stage, computers use methods of machine learning to verify linguistic hypotheses over large quantities of data, both supervised learning (more "easy" algorithms, better results, but manually tagged data necessary for training) and unsupervised learning (more "difficult" algorithms, not so good results, but no training data is necessary).

In case of intelligent learning environments, computers are expected to help in choosing the learning strategy by first evaluating the level of a student, after this proposing the optimal learning plan, then giving support during the learning, and at the end applying the final evaluation. Note that the intention is that all these steps would be automatic or at least computer assisted (semi-automatic).

The volume contains six papers on computation linguistics that deal with the themes such as automatic evaluation of automatic text summarization, semantic annotation of social networks, unsupervised dependency parsing, statistical machine translation, general steps in semantic processing, and special type of evaluation of a sentiment classifier.

There are also six papers on intelligent learning environments, related to the themes of learning styles, user interface for learning, virtual reality and affective computing, learning strategies (SCORM) and strategic learning.

It can be noted that there are several paper that analyze the theme of affective computing and sentiment analysis both in computational linguistics and in intelligent learning environments. This is a general trend in the modern artificial intelligence.

November 2013, *Grigori Sidorov*