Semantic Analysis: Theory, Applications and Use Case

Dmitry Kan

Saint-Petersburg State University Universitetsky prosp. 35, 198504 Saint-Petersburg, Russia {dmitry.kan}@gmail.com Vladimir Poroshin

M-Brain Mechelininkatu 1a, 00180 Helsinki, Finland {vladimir.poroshin}@gmail.com

Abstract

This seminar talk will cover in brief the important basics of the computer semantics theory [1]. The theory accurately formalizes Russian language to the level understandable by a computer. The core of the theory is believed to be applicable to other natural languages like English and Finnish. Main applications of the computer semantics theory range from intelligent searching systems [2] to machine translation [3] and knowledge bases. In the same talk we would like to introduce our research ideas for practical use cases which base on the computer semantics theory and its existing implementation in the form of semantic analyzer.

Index Terms: semantic analysis, natural language model, use cases.

REFERENCES

- [1] Tuzov V. A.: Computer semantics of Russian language. Saint-Petersburg University Press, Saint-Petersburg, 2004 (in Russian).
- [2] Kan D. A., Lebedev I.S.: Method of formalizing semantical links between objects in a natural language text. Bulletin of Saint-Petersburg University. Series 10. 2008. Issue 2. pp 56-61 (in Russian).
- [3] Kan D. A.: Method for automatic creation of translational semantic dictionary for Machine Translation // XL Conference Control Processes and Stability'09, pp. 429-435 (in Russian).