

**Fakultet tehniških nauka - Departman za računarstvo i automatiku  
Odsek za primenjene računarske nauke i informatiku**

organizuje pozvano predavanje

Tema 1:

**Measuring appropriateness of DSLs derived from different  
metamodels**

Tema 2:

**Analyzing two aspects of teaching at the  
Faculty of Computer and Information Science in Ljubljana**

Predavač:

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Mesto i vreme:

**FTN, Svečana sala, ponedeljak, 14. septembar 2015. u 17.00h**

Abstract 1:

Descriptions of domain-specific languages (DSL) are expressed using various metamodels. Thus, to determine the quality of a DSL it is important to estimate the influence of a DSL's metamodel as well. In this view the aspect of functional suitability is especially important. As defined by the standard ISO/IEC 25010 (SQuaRE), functional suitability consists of completeness, correctness, and appropriateness. The former two characteristics are highly domain dependant and only appropriateness can be (partly) evaluated without specifying the domain.

In my presentation a relationship between the metamodel's complexity (regarding it's syntax) and the appropriatenes of DSLs derived from it will be presented. This relation can be measured using two metrics. The first metric DS-depth(M) evaluates a metamodel M and estimates the appropriateness of derived DSLs, while the second DS-magnitude(L) incorporates the domain to further assesses the quality of a specific DSL L in terms of appropriateness. Both metrics are suitable for grammar based DSLs. The metrics are demonstrated using examples from chess and graph domains.

## Abstract 2:

A few years after successful implementation of the Bologna reform at the Faculty of Computer and Information Science at the University of Ljubljana we performed two analysis on aspects which are (or may be understood as) required by Bologna reform.

The first analysis is on the implementation of course electiveness in different study programmes. Electiveness was differently implemented at academic and professional study programmes at FCIS. By analyzing the actual data of elective course selection by students for both programs we tried to answer on the question: which way is better, a more rigid and simple to perform one, or a more flexible with complicated implementation.

The second analysis evaluates the effect of automatization of assessment (of practical work), which should have positive effect on course teaching performance. Due to recent changes of the content, structure and assessing method of practical work of the ADS1 course we had an excellent opportunity to check this issue. We analyzed the previous and current practical work assessment data, grades and a questionnaire to find out the overall automatisisation of assessment was successful. Still, some issues remain open.

## O predavaču:

Igor Rožanc received his M.Sc. and Ph.D. degrees in computer science from the University of Ljubljana in 1995 and 2003, respectively. He is currently employed at the position of Senior Lecturer at the same institution and teaches programming and software quality courses. Throughout his career he has been actively involved in the design and development of student information systems. His research interests include software quality models, software metrics, model-driven development and domain-specific languages.