

Problems of the integration of UML language particular models, Marek Kacprzak

Abstract Problems of the integration of UML language particular models are presented. An example of the integration of two basic diagrams: activity diagrams and class diagrams is considered. Correctness criteria for activity diagrams, an integration algorithm of the both kinds of diagrams and consistency criteria for the integrated model are also described.

Electronic voting, Andrzej Kaczmarczyk

Abstract The paper is a chapter of the author's book under preparation, titled "Cyberdemocracy. A Future Democratic Paradigm of the Information Society". In the paper present state of technology of electronic voting and its application is discussed, with particular consideration for the internet voting. Standards for electronic voting equipment, systems and programming languages are discussed also.

Multiple Criteria Decision Making: selecting variants along compromise lines, Ignacy Kaliszewski

Abstract We consider multiple criteria decision making problems in which decision alternatives are evaluated against a given set of criteria. To solve problems of this class, whether interactively or in one step, a common approach is to approximate preferences articulated by the decision maker, interactively or a priori, by scalarizing functions. Such functions when optimized over the set of feasible alternatives yield efficient alternatives.

The aim of this paper is to point to deficiencies of such an approach. Their roots are both in the inherent nature of some classes of decision problems, but also in the scalarizing function approach itself, at least as it is currently formulated and interpreted.

We present a multiple criteria decision making setting, which still makes use of scalarizing functions, but encapsulates DM's preferences and fulfils his expectations in, we believe, a more accurate way.

Laser instrument for surface roughness evaluation operating on the principle of measuring the TIS parameter, Romuald Synak, Marcin Pawełczak, Włodzimierz Lipiński, Tomasz Lis

Abstract A handy laser instrument performing non-contact measurements of surface roughness and surface diffuse and specular reflectances is presented. The instrument operates on the principle of measuring the TIS parameter. The distinguishing feature of this scatterometer is the unique measurement head construction, resulting in its small size. Results of some investigations as well main features and specifications of the scatterometer are presented..