ПРОБЛЕМЫ УПРАВЛЕНИЯ

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CONTENTS & ABSTRACTS

Burkov V.N., Novikov D.A., and Shchepkin A.V.

The basic model of ecological-economic system (Ec-ES) is introduced, and its generalizations are analyzed. The brief survey of EcES management models and mechanisms is given.

Keywords: ecological-economic system, game theory, mechanisms of decision-making.

Kurdukov A.P. and Timin V.N.

The paper addresses the problem of external disturbance attenuation in a power system. The problem solution is based on the technique of closed-loop pole placement in a given region of complex plain, as well as loop shaping using linear matrix inequalities.

Keywords: power system control, H_∞ control theory, linear matrix inequalities, disturbance attenuation, loop shaping, closed-loop pole placement in a given region.

Gusev S.S. and Chadeev V.M.

The identification algorithm of static object with restrictions is considered. The case when the error of output measurement of object y leads to exceeding the bounds of area of admissible estimations of parameters H with some probability p for all n-dimensional blocks and the case of greater errors when the probability is strictly equal to zero are offered. The connection of error of measurement and probable distribution of parameters estimation error is analysed with use of Kramer formula.

Keywords: identification, restrictions, static object, parameter estimations, error of output measurement.

Afanaseva K.E. and Shiryaev V.I.

The paper gives the estimation algorithms of object's state on the basis of data on "relative" objects under disturbances and not precise and full measurements of object's vector. The information on disturbances and measurement errors is known only to some defined sets. If the trajectory of object is changed, the information on "relative" objects is used to define the model for the object considered.

Keywords: adaptive guaranteed estimation, information set, "relative" objects, discrepancy.

Pronina V.A. and Shipilina L.B.

The method for building of ontology for a subject domain is offered. It allows automating building taxonomy of concepts with use of expert knowledge on attributes of subject domain. The method is based on the binary relations of "xistence constraints"on set a of attributes and Formal Conceptual Analysis. The example of taxonomy fragment for graph theory, built with the use of offered method is made.

Keywords: ontology, taxonomy, formal concept analysis, relation of existence constraints, graph theory.

Vishnevsky V.M., Zhelezov R.V.

The architecture of developed information system for finding optimal path in public transport is proposed. The original algorithm for finding optimal paths taking into consideration public transport timetables is produced.

Keywords: information system, optimal path, public transport, timetable, Internet.

Nikitin V.V.

To improve the ontology of professional activity objects in order to develop professional and educational standards, the expert-classification procedure is proposed. It essentially uses automatic classification algorithms.

Keywords: domain ontology, objects of professional activity, expert-classification algorithms.

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Gilyazov R.L. and Stolbov V.Yu.

The paper considers the problems of selecting the optimal multiservice communication network configuration. The original method of allowing for hierarchical structure of fuzzy conflicting interests of various groups of users is suggested. Some demonstration examples are made.

Keywords: multiservice communication networks, optimization, social groups of users, hierarchical structure of fuzzy preferences.

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Zavgorodniy V.I.

The paper considers management of information risks at a level of enterprise's entire information sphere and is not limited to frameworks of information safety. The method for optimization of choice of mechanisms of protection against information risks is offered.

Keywords: information risks, system management of information risks, information risk control system, choice of mechanisms for protection against information risks.

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Keywords: rating of scientific journal, decision making, priority of criteria, statistical procedure, learning sample, analytic hierarchy process, database, SQL.

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Andrienko A.Ya. and Ivanov V.P.

The basic results of semicentenial development of family of control systems of liquid fuel consumption for domestic carrier rockets and intercontinental ballistic missiles are stated. Physicotechnical bases of construction of these systems are explained.

Keywords: liquid rocket engines, power characteristics, guarantee fuel capacity, management of fuel consumption.

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Durnev R.A.

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Keywords: informing and warning of population, information-telecommunication technologies, information centre, terminal complex, systems functions.

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Kononov O.A. and Kononova O.V.

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Keywords: information technologies, information security, information relations, computer ethics code, information ethics.

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