ОНТОЛОГИЯ
ПРОЕКТИРОВАНИЯ
научный семинар

Кафедра конструкции и проектирования летательных аппаратов
Самарского государственного аэрокосмического университета
имени академика С.П. Королева (национальный иследовательский университет)
Институт проблем управления сложными системами РАН
Научный журнал "Онтология проектирования"

Прошедшие заседания в 2011 году:

27 октября 2011 года
Тема семинара: «Неокибернетика: алгоритмы,
математика эволюции и технологии будущего»
Докладчик: *Крылов Сергей Михайлович*,
д.т.н., профессор СамГТУ

26 мая 2011 года
Тема семинара:
«Концепция робота-конструктора самолета»
Докладчики: *Боргест Николай Михайлович*,
к.т.н., доцент кафедры КиПЛА СГАУ,
Шустова Дина Владимировна, аспирант
кафедры КиПЛА

6 мая 2011 года
Тема семинара:
«Представление знаний в инженерном деле»
Докладчик: *Смирнов Сергей Викторович*,
д.т.н., директор ИПУСС РАН.

Планируемые заседания в 2012 году:
Докладчики:
д.т.н. Скобелев П.О., НПК "Разумные решения",
д.т.н., профессор Пиявский С.А., СГАСУ,
д.т.н., профессор Виттих В.А., ИПУСС РАН,
д.т.н., профессор Комаров В.А., СГАУ и др.

Смирнов С. В.

Крылов С.М.

Боргест Н.М.

ОНТОЛОГИЯ В СГАУ
(факультет летательных аппаратов)

«ОНТОЛОГИЯ ПРОИЗВОДСТВЕННОЙ СФЕРЫ» - учебная дисциплина для студентов по специальности: «Автоматизированное управление жизненным циклом продукции»

Учебное пособие:

Боргест Н.М., Симонова Е.В. Основы построения мультиагентных систем, использующих онтологию. – Самара: Изд-во СГАУ, 2009. – 80 с.

Методические указания к лабораторным работам:

Боргест Н.М., Симонова Е.В. Использование онтологии при выборе самолета под заданное техническое задание. – Самара: Изд-во СГАУ, 2008. – 56 с.

Боргест Н.М., Симонова Е.В. Использование онтологии при выборе удельной нагрузки на крыло. – Самара: Изд-во СГАУ, 2008. – 40 с.

Боргест Н.М., Симонова Е.В. Использование онтологии при выборе потребной тяговооруженности самолета. – Самара: Изд-во СГАУ, 2008. – 36 с.

Боргест Н.М., Симонова Е.В. Использование онтологии при выборе двигателя для проектируемого самолета. – Самара: Изд-во СГАУ, 2008. – 36 с.

Боргест Н.М., Симонова Е.В. Логистика воздушного флота. – Самара: Изд-во СГАУ, 2008. – 52с.

«ОНТОЛОГИЯ ПРОЕКТИРОВАНИЯ» - учебная дисциплина для магистров по специальности: «Авиастроение» (*электронный образовательный контент*)

Учебное пособие

Боргест Н.М. Онтология проектирования: теоретические основы. Часть 1. Понятия и принципы. – Самара: СГАУ, 2010. - 88 с.

N.M. Borgest. Ontology of Designing (theoretical basis). Part 1. Concepts and Principles. - Samara: Published at Samara Space University, 2011. - 88 p.

Методическое пособие к лабораторным работам

Боргест Н.М., Симонова Е.В., Шустова Д.В. Решение проектных задач с помощью онтологических систем. – Самара: СГАУ, 2010. - 128 с.

N.M. Borgest, E.V. Simonova, D.V. Shustova. Design Problem Solving using Ontological Systems. Methodological guidelines for laboratory works. - Samara: Published at Samara Space University, 2011. -128 pages

Подборка научных статей

Боргест Н.М. Антология онтологии. – Самара: СГАУ, 2010. - 88 с.

N.M. Borgest. Anthology of ontology. - Samara: Published at Samara Space University, 2011. -18 p.

Методические указания

Боргест Н.М. Истоки и источники онтологии проектирования. – Самара: СГАУ, 2010. -16 с.

N.M. Borgest. Origins and Sources of ontology of designing. Recommended sources. - Samara: Published at Samara Space University, 2011. -16 p.

FINITION AND SCOPE: Ontology, originally a fundamental part of philosophical enquiry, is concerned with the analysis and categorization of what exists. In recent years, however, a complementary focus of ontological inquiry gained significant momentum fueled by the advent of complex information systems which rely on robust and coherent representations of their subject matter. The systematic study of such representations, their reasoning techniques and their relations to reality, are at the center of the modern discipline of formal ontology.

Formal ontology in this modern sense is now a research focus in such diverse domains as conceptual modeling, database design, software engineering, organizational modeling, artificial intelligence, computational linguistics, the life sciences, bioinformatics, geographic information science, knowledge engineering, information retrieval, and the semantic web. Researchers in all these areas increasingly recognize the need for serious engagement with ontology, understood as a general theory of the types of entities and relations making up their respective domains of enquiry, in providing a solid foundation for their work.

The FOIS conference is designed to provide a meeting point for researchers from all disciplines with an interest in formal ontology. The conference encourages submission of high quality articles on both theoretical issues and concrete applications. As in previous years, FOIS 2012 is intended as a nexus of interdisciplinary research and communication.

The FOIS conference series began with the first meeting in Trento, Italy in June 1998 followed by meetings in 2001, 2004, 2006, 2008, and 2010. The seventh FOIS conference will be held in Graz, Austria July 24-27, 2012, in conjunction with the 3rd International Conference on Biomedical Ontology (ICBO 2012).

FOIS is the flagship conference of the International Association for Ontology and its Applications (**IAOA**), which is a non-profit organization the purpose of which is to promote interdisciplinary research and international collaboration at the intersection of philosophical ontology, linguistics, logic, cognitive science, and computer science, as well as in the applications of ontological analysis to conceptual modeling, knowledge engineering, knowledge management, information-systems development, library and information science, scientific research, and semantic technologies in general.

TOPICS OF INTEREST: We seek high-quality papers on a wide range of topics. While authors may focus on fairly narrow and specific issues, all papers should emphasize the relevance of the work described to formal ontology and to information systems. Papers that completely ignore one or the other of these aspects will be considered as lying outside the scope of the meeting. Topic areas of particular interest to the conference are:

FOUNDATIONAL ISSUES

- Kinds of entity: particulars/universals, continuants/occurrents, abstracta/concreta, dependent entities/independent entities, natural objects/artifacts
- Formal relations: parthood, identity, connection, dependence, constitution, subsumption, instantiation
- Vagueness and granularity
- Identity and change
- Formal comparison among ontologies
- Ontology of physical reality (matter, space, time, motion, …)
- Ontology of biological reality (genes, proteins, cells, organisms, …)
- Ontology of artifacts, functions and roles
- Ontology of mental reality and agency (beliefs, intentions, emotions, …)
- Ontology of social reality (institutions, organizations, norms, social relationships, artistic expressions, …)
- Ontology of the information society (information, communication, meaning negotiation, …)
- Ontology and Natural Language Semantics, Ontology and Cognition

METHODOLOGIES AND APPLICATIONS

- Top-level vs application ontologies
- Ontology integration and alignment; role of reference ontologies
- Ontology-driven information systems design
- Ontological foundations for conceptual modeling
- Ontology-based application systems
- Requirements engineering
- Knowledge engineering
- Knowledge management and organization
- Knowledge representation; Qualitative modeling
- Computational lexicons; Terminology
- Information retrieval; Question-answering
- Semantic web; Web services; Grid computing
- Domain-specific ontologies, especially for: Biomedical science, E-business, Enterprise integration, Engineering, Geography, Law, Library science, Linguistics, …

December 31, 2011:	Workshops and tutorials proposals submission deadline (no extension)
January 25, 2012:	Notification of acceptance of workshops and tutorials
January 31, 2012:	Paper submission deadline
March 8, 2012:	Notification of acceptance of conference papers
March 15, 2012:	Workshop papers submission deadline
March 24, 2012:	Camera-ready deadline for accepted papers
April 15, 2012:	Notification of workshop paper acceptance
June 30, 2012:	Camera-ready copies submission deadline
July 24, 2012:	FOIS workshops and tutorials
July 24, 2012:	FOIS opening and joint FOIS / ICBO reception (evening)
July 25, 2012:	ICBO + FOIS joint sessions (morning)
July 25, 2012:	ICBO + FOIS joint workshops and tutorials (afternoon)
July 26, 2012:	FOIS scientific sessions (full day)
July 26, 2012:	FOIS dinner
July 27, 2012:	FOIS scientific sessions (full day)

FOIS 2012: 7th International Conference on Formal Ontology in Information Systems

http://www.kr-med.org/icbofois2012/fois.htm

I A O A **I**nternational **A**ssociation for **O**ntology and its **A**pplications

1-th International Scientific Conference
"Ontology of Designing"

Международная научная конференция

ОНТОЛОГИЯ

ПРОЕКТИРОВАНИЯ

на базе Самарских учреждений и предприятий

при поддержке журнала*

Самара -2012

*Подробности на сайте и в ближайших выпусках журнала