Valná hromada ČSKI

Vážení kolegové, valná hromada ČSKI se koná v pátek 20. června 2014 v 15 hodin ve vila Lanna (V sadech 1, 16000 Praha 6).

V průběhu valné hromady budou slavnostně předány ceny vítězům soutěže Antonína Svobody. Přítomní také budou moci vyslechnout přednášku prof. ing. Miroslava Tůmy, CSc. "Jak rozdělit grafy, sítě a data pro soudobé počítačové architektury".

Dubnové kalendárium

2. **P. Cintula: Pavelka-style completeness in fuzzy logics with non-continuous connectives**

3. **The 34th Pattern Recognition and Computer Vision Colloquium, Spring 2014**

8. **V. Beneš: Rozklad chaosu u funkcionálů Poissonových procesů**

9. **M. Dostál: Intro to simplicial sets**

22. **M. Matuszak: Image segmentation by locally specified multi-coloured polygonal Markov fields**

23. **M. Dostál: Commutativity of limits and colimits**

29. **E. B. Vedel Jensen: Stereology of tensors**

30. **P. Révay: Formalization of Hajek's BL in Isabelle/HOL**

Odborná skupina pro rozpoznávání – CPRS

pořádá spolu s Centrem strojového vnímání (CMP) katedry kybernetiky ČVUT FEL dne 3. dubna od 10:50 hodin

The 34th Pattern Recognition and Computer Vision Colloquium,Spring 2014

Kolokvium se koná v místnosti č. 205, FEL ČVUT, Karlovo nám. 13, Praha 2, budova G.

Program:

10:50-11:00	**Welcome and speaker introduction**
11:00-11:45	Michael Hornacek (TU Wien, Austria) **SphereFlow: 6 DoF Scene Flow from RGB-D Pairs**
11:45-12:30	Stefan Roth (TU Darmstadt, Germany) **Locally Rigid Models for 3D Scene Flow**
12:30-13:30	*Lunch break*
13:30-14:15	Paolo Favaro (U. Bern, Switzerland) **Total Variation Blind Deconvolution: The Devil is in the Detail**
14:15-15:00	James Pritts (CTU Prague, Czech Republic) **Detection, Rectification and Segmentation of Co-planar Repeated Patterns** *Coffee break*
15:30-16:15	Giovanni Maria Farinella (University of Catania, Italy) **Instant Scene Context Recognition on Mobile Platform**
16:15-17:00	Gerhard K. Kraetzschmar (Bonn-Rhein-Sieg University of Applied Sciences, Germany) **Computer Vision Challenges in RoboCup: Robot Soccer, RoboCup@Home, RoboCup@Work**
17:00 -	CMP visit (laboratory, demos, posters), informal discussion

Další informace viz
http://cmp.felk.cvut.cz/cmp/events/colloquium-2014.04.03/ .

Odborná skupina pro stereologii

vás zve na *Seminář ze stochastické geometrie*.

Na semináři jsou referovány nové nebo aktuální výsledky z oboru stochastické geometrie, integrální geometrie, geometrické pravděpodobnosti, geometrické statistiky a stereologie.

Seminář se koná v úterý od 15:40 do 17:10 v seminární místnosti Katedry pravděpodobnosti a matematické statistiky MFF UK (Karlín, Sokolovská 83, 1. patro). Zájemci jsou srdečně zváni.

Program:

8. dubna   **Viktor Beneš: Rozklad chaosu u funkcionálů Poissonových procesů**

22. dubna   **Michal Matuszak (Torun): Image segmentation by locally specified multi-coloured polygonal Markov fields**

29. dubna   **Eva B. Vedel Jensen (Aarhus): Stereology of tensors**

Odborná skupina aplikované matematické logiky

Vás zve na semináře, které se konají vždy **ve středu** ve 14 hodin v zasedacím sále Ústavu informatiky AV ČR (místnost č. 318), Pod Vodárenskou věží 2, 182 07 Praha 8 – Libeň, stanice metra C Ládví.

Program:

2. dubna   **Petr Cintula: Pavelka-style completeness in fuzzy logics with non-continuous connectives**

Pavelka-style completeness, a property relating degrees of provability and truth, was previously studied mainly in the context of logics with continuous connectives. It is known that in some other logics one can use infinitary deduction rule(s) to retain this form of completeness. The present paper offers a systematic study of this idea for fuzzy logics which expand MTL and are given by a fixed standard algebra. Besides exploring the structure of classes of all 'reasonable' expansions of these logics by rational truth constants we provide, for several prominent cases, axiomatizations of their minimal expansion enjoying Pavelka-style completeness.

9. dubna   **Matěj Dostál: Intro to simplicial sets: Chapter 0, Section 0**

By trying to continue in the sequence (point, line segment, triangle, tetrahedron, ...), we arrive at the notion of a higher-dimensional simplex. Put heaps of different simplices together side by side and you get a simplicial complex. Generalising further and allowing 'gluing' two faces of a simplex together, we get the notion of a simplicial set.

Thus we work with things that are (1) geometric, (2) combinatorial in nature. What is worse: (3) they allow for a categorical treatment. We will look at the interplay of (1),(2),(3) to the extent to which the speaker understands it. Whence the title of the seminar arises.

23. dubna   **Matěj Dostál: Commutativity of limits and colimits**

The finite embeddability property for a class of algebras states that every finite partial subalgebra of an algebra in the class can be embedded in a finite full algebra in the class. This gives a way for deciding quasiequations for finitely axiomatized varieties and thus yields the strong finite model property for substructrural logics corresponding to varieties of residuated that have the FEP.

C. van Alten and W. Blok show that the FEP holds for various classes of residuated structures under either the assumption of integrality, or by the combination of commutativity and a knotted axiom. Unfortunately, the FEP for the subvariety axiomatized by a single knotted axiom fails.

We prove the FEP for knotted varieties which satisfy mild generalizations of commutativity, the most basic one being xyx=xxy. The proof relies on an understanding of the underlying monoid that allows us to consider the essential monoid properties separated from the order properties. The monoid contribution is then shown to be finite, while the order contibution is controlled using the theory of well-ordered sets. The proof is set in the context of residuated frames.

30. dubna   Petr Révay: Formalization of Hajek's BL in Isabelle/HOL

Isabelle/HOL is the most widespread instance of interactive computer proof-assistant Isabelle. It allows to formalize high-order mathematical formulas as well as their proofs in a logical calculus. For this purpose, Isabelle/HOL uses the Isar functional language, which is strongly oriented to human-readability of the resultant code to obtain one of the main advantages of Isabelle - the formal verification understandable to all: to the computer, the user and wide mathematical community.

I would like to present you the results of my work on formalization of syntactic part of prof. Hájek's Basic Fuzzy Logic, respectively the construction of reasoning environment beginning with definitions of connectives of BL, going through the inductive definition of the provability relation, the axiomatization and resulting in proving some theorems in calculus and formalized proof of the local deduction theorem and the others required lemmas.

Volná místa

General Motors RD, USA

General Motors R&D has two openings in the vehicle health management area, one at the entry level and the other at the mid-career level. Interested candidates are encouraged to apply through the following links:

http://jobs.gm.com/job/Warren-Senior-Researcher-Diagnosis-and-Prognosis-Job-MI-48088/42236400/

http://jobs.gm.com/job/Warren-Researcher-Diagnosis-and-Prognosis-Job-MI-48088/42236500/

Senior Researcher - Diagnosis and Prognosis-RES0000402

Major Duties and Responsibilities:
- Develop next-generation technologies for vehicle diagnosis, prognosis, and fault-tolerant controls as well as integration.
- Develop and execute technical plans, including concept generation, development, implementation, and evaluation.
- Generate innovative ideas and establish new research areas.
- Lead technical discussions and reviews as an expert in related areas of responsibility.
- Maintain state-of-the-art knowledge in related areas of responsibility.
- Communicate ideas, plans and results effectively via presentations and written reports.
- Work effectively with peers, management, operations groups, and outside organizations.

Qualifications Basic Required Skills:
- PhD in Electrical, Controls, Mechanical, Aerospace Engineering or Computer Science with demonstrated research capability or equivalent experience
- 3+ years of related work experience
- Strong background in diagnosis, prognosis and fault-tolerant control systems analysis and synthesis.
- Strong background in system diagnosis and prognosis algorithms development and integration.
- Effective verbal and written communication skills.
- Excellent interpersonal skills to work effectively with GM internal and external customers.

Basic Preferred Skills:
- 5+ years of related work experience
- Experience in vehicle diagnosis and prognosis integration.
- Experience in remote and on-board diagnosis and prognosis.
- Experience in vehicle dynamics.
- Experience in environmental sensors.
- Experience in electromechanical actuators.
- Experience in Matlab/Simulink and Saber.
- Experience in dSpace rapid prototyping.
- Experience in hardware and software development Location: Warren, MI

Researcher - Diagnosis and Prognosis-RES0000401

Major Duties and Responsibilities:
- Conduct research on next-generation technologies for vehicle diagnosis, prog-

nosis, and fault-tolerant controls as well as integration.
- Generate innovative ideas, establish new research areas, and develop and execute technical plans.
- Contribute to technical discussions and reviews as an expert in related areas of responsibility.
- Maintain state-of-the-art knowledge in related areas of responsibility.
- Communicate ideas, plans and results effectively via presentations and written reports.
- Work effectively with peers, management, operations groups, and outside organizations.

Qualifications Basic Required Skills:
- PhD in Electrical, Controls, Mechanical, Aerospace Engineering or Computer Science with demonstrated research capability or equivalent experience
- Strong background in diagnosis, prognosis and fault-tolerant control systems analysis and synthesis.
- Strong background in system diagnosis and prognosis algorithms development and integration.
- Effective verbal and written communication skills.
- Excellent interpersonal skills to work effectively with GM internal and external customers.

Basic Preferred Skills:
- 3+ years of related work experience
- Experience in vehicle diagnosis and prognosis integration.
- Experience in remote and on-board diagnosis and prognosis.
- Experience in vehicle dynamics.
- Experience in environmental sensors.
- Experience in electromechanical actuators.
- Experience in Matlab/Simulink.
- Experience in dSpace rapid prototyping.
- Experience in hardware and software development Location: Warren, MI

Research Fellow: School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore

One research fellow position is currently available to work on the project 'Development of Intelligent Power Management System for More-Electric Aircrafts (MEA)' in collaboration with Rolls-Royce@NTU Corporate Lab. The main tasks include flight simulator (e.g. Flightgear simulator), flexible and scalable control architecture development. Applicants should have a PhD in related disciplines, preferably in aircraft electric power systems and control, and have a promising record of research publications. The appointment can start immediately for a period of two years, with the possibility of extension for up to another 3 years.

If you would like to apply, please send a detailed resume (CV), a statement of research interest and goals to Professor Jianliang Wang Email: ejlwang@ntu.edu.sg

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Různé konference

ABDA'14 - The 2014 International Conference on Advances in Big Data Analytics, Las Vegas, USA, July 21-24, 2014. Paper submission deadline: April 19, 2014.   http://www.world-academy-of-science.org/worldcomp14/ws/conferences/abda14

DS 2014 - 17-th International Conference on Discovery Science, Bled, Slovenia, October 8-10, 2014. Paper submission deadline: May 9, 2014. http://ds2014.ijs.si/

EAIT 2014 - Fourth International Conference on Emerging Applications of Information Technology, Kolkata, India, December 19-21, 2014. Paper submission deadline: May 15, 2014.   https://sites.google.com/site/csieait

CSA-14 - The 6th FTRA International Conference on Computer Science and its Applications, Guam, USA, December 17-20, 2014. Paper submission deadline: June 30, 2014.   http://www.ftrai.org/csa2014

ROBIO 2014 - The 2014 International Conference on Robotics and Biomimetics, Hanoi, Vietnam, December 5-10, 2014. Paper submission deadline: June 30, 2014.   www.robio2014.org

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