

Zpravodaj pro kybernetiku a informatiku

ČSKI Česká společnost pro kybernetiku a informatiku

listopad
2017

Člen: CEPIS, ECCAI, IAPR, IASS/AIS, IFAC, IFIP, IT STAR. Založena 1966.

Sekretariát: Pod Vodárenskou věží 2, 182 07 Praha 8 – Libeň tel: 2 6605 3901 fax: 2 8658 5789

e-mail: cski@utia.cas.cz

<http://www.cski.cz>

Listopadové kalendárium

1. Z. Haniková: Notes on rational constants in Łukasiewicz logic
8. T. Moraschini: A general relational semantics for monotone logics
22. C. Noguera: Bringing logic back to reasoning

Odborná skupina pro logiku, pravděpodobnost a usuzování

Vás zve na semináře, které se konají vždy ve středu v 10 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:

1. listopadu

Zuzana Haniková:

Notes on rational constants in Łukasiewicz logic

Rational Pavelka logic (RPL) is a conservative expansion of Łukasiewicz logic; this is a consequence of standard completeness for finite theories on the propositional level, and a non-trivial result Hájek, Paris and Shepherdson on first-order level. Moreover, Hájek and others have noted that in propositional Łukasiewicz logic, one can get rid of rational constants by considering a suitable theory, whereby certain variables assume the role of the constants (i.e., their valuations in the standard MV-algebra are fixed). One can then speak about a faithful interpretation of theories in RPL in theories in L . I will discuss variants of this implicit definability result. Thanks to these, one can save labour on obtaining metamathematical results about RPL by reasoning about (theories in) Łukasiewicz logic instead. Under the circumstances, it seems hard to maintain claims on RPL (or so-called logic with evaluated syntax, for that matter) being stronger or more general than Łukasiewicz logic; in particular, an apparatus for reasoning with partly true propositions can be devised without the intended degrees of truth being explicitly mentioned in the formalism. Finally, these findings are reminiscent of the formal, deductive facet of precision introduced by formal fuzzy logic, as discussed previously by Marra and Běhounek

8. listopadu Tommaso Moraschini: A general relational semantics for monotone logics

It is well known that every propositional logic L has an algebra-based semantics $Alg(L)$ with respect to which it is sound and complete. Well-behaved logics L tend to have also a relational semantics, which is given in terms of relational structures that are in some sense dual to the algebras in $Alg(L)$. This is indeed the case both for intuitionistic and normal modal logics, since it is well known that every Heyting algebra can be turned into an intuitionistic frame, and that every modal algebra can be turned into a Kripke frame, and viceversa. The aim of this talk is to describe a general method to provide relational semantics $Rel(L)$ for almost arbitrary propositional logics L , and to do it in such a way that the relational semantics $Rel(L)$ consists exactly in the class of suitably defined relational duals of algebras in $Alg(L)$

22. listopadu Carles Noguera: Bringing logic back to reasoning

In the seminar we will discuss the theses and reasearch programme proposed in the book Human Reasoning and Cognitive Science by Stenning and Van Lambalgen

Různé konference

ICACI 2018 – 10th International Conference on Advanced Computational Intelligence, March 29-31, 2018 Xiamen, China. Paper submissions deadline: November 15, 2017. <http://www.icaci2018.org>

ICUAS'18 – The 2018 International Conference on Unmanned Aircraft Systems, June 12 - 15, 2018, Dallas Marriott City Center, Dallas, TX, USA. Paper submissions deadline: February 12, 2018. <http://www.uasconferences.com/>

ROCOND'18 – 9th IFAC Symposium on Robust Control Design and **LPVS'18** – 2nd IFAC Workshop on Linear Parameter Varying Systems, September 03-05, 2018, Florianopolis, SC, Brazil. Paper submissions deadline: January 15, 2018. <http://rocond18.ufsc.br> <http://lpvs18.ufsc.br>

Volná místa

The Chinese University of Hong Kong, Hong Kong

The Department of Mechanical and Automation Engineering (MAE) at CUHK is seeking excellent candidates in the area of systems and control in all levels.

Applicants should have (i) a PhD degree in Mechanical Engineering/Electrical Engineering or a related discipline, (ii) a proven record of academic scholarship such as publications in IEEE Transactions on Automatic Control, Automatica, International Journal of Robust and Nonlinear Control, etc., and (iii) high potential for excellence in teaching and research. Experience in technology transfer and entrepreneurship will also be valued.

The appointees will (a) teach undergraduate and postgraduate courses; (b) develop an externally funded high impact research programme; (c) supervise postgraduate students; and (d) provide service to the department, professional organizations and the community.

All positions are similar to tenure tracked positions at Universities in USA; that is, appointments will initially be made on contract basis for up to three years, which, subject to mutual agreement, may lead to longer-term appointment or substantiation later. Outstanding candidates with substantial experience for Professor rank may be considered for substantive appointment forthwith. The exact start date will be negotiated with the successful applicants.

Salary and Fringe Benefits Salary will be highly competitive, commensurate with qualifications and experience. The University offers a comprehensive fringe benefit package, including medical care, plus a contract-end gratuity for appointments of two years or longer and housing benefits for eligible appointees. (Starting annual salary for Assistant Professor is above US\$100k, plus housing allowance of US\$25k per year; low salary tax rate: <15

Applicants please apply via the link at https://cuhk.taleo.net/careersection/cu-career_teach/jobdetail.ftl?joccb=170001DV with uploading the full CV, copies of academic credentials, publication list with abstracts of selected published papers, details of courses taught and evaluation results (if available), a research plan, a teaching statement, together with names, addresses and fax numbers/e-mail addresses of three to five referees to whom the applicants' consent has been given for their providing references (unless otherwise specified).

The Chinese University of Hong Kong (CUHK) is ranked one of the top 50 universities worldwide according to the QS World University Rankings of 2016/17. It is also named the Most Innovative University in Hong Kong by Thomson Reuters in their survey of August 2016. In the 2014 Research Assessment Exercise, the mechanical engineering discipline of CUHK was ranked first among its counterparts of all universities in Hong Kong in terms of the ratio of world leading research (top category of 4*). Further information about the Department is available at <http://www.mae.cuhk.edu.hk>.

For more information, please contact Ms. YL Kan at ylikan@mae.cuhk.edu.hk.

Vydává Česká společnost pro kybernetiku a informatiku pro potřeby svých členů. Neprodejné. Neprošlo korekturami ani jazykovou úpravou. Informace o členství v ČSKI na jejím sekretariátě. Příspěvky pošlete na adresu sekretariátu (přednostně emailem a v elektronické formě LaTeX).

Uzávěrka příštího čísla: 27. listopadu 2017.
Texty z tohoto zpravodaje smějí být uveřejněny jinde jako celek i po částech. Prosíme ovšem o uvedení odkazu na ČSKI jako zdroj.