FACS FACTS

The Newsletter of the BCS Special Interest Group in

Formal Aspects of Computing Science.

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Editorial

Welcome to the first FACS newsletter of 2001. This issue is rather long, mainly because there have been a large number of events and positions to be filled publicised in the last few months. You may be able skip past these if you wish by clicking on entries in the contents list.

The FACS newsletter would welcome short articles, not full-blown papers, especially on industrial niche applications. Send them to Tim Denvir, t-denvir@dircon.co.uk

Now, some FACS news.

The subscription arrangement with EATCS, whereby members' subscriptions to EATCS can be paid with their FACS subscriptions, is terminated. EATCS subscriptions can be paid directly by credit card and so there is no longer any financial advantage in bundling the two together. The arrangement was administratively awkward to implement. So those who are members of EATCS need to watch out for an EATCS subscription request form when they receive their EATCS bulletin.

The "British Column" of the EATCS Bulletin has been taken up by BTCSC.

Regular FACS subscriptions will be discussed at the next AGM. Meanwhile new members will be charged a £5 joining fee.

The committee are taking steps to update the FACS website.

You will see from the list of FACS Officers that a number of committee members have responsibility for liaison with other groups. These are groups that are considered to have some connection or interest in common with FACS. The groups are otherwise independent of FACS.

We welcome Paul Boca on to the committee.

We plan to have a FACS event in December 2001, at either Kings College London or the Royal Society. The exact focus is being discussed, but there are several ideas.

The Formal Aspects of Computing Journal has changed from the red and silver format to a new Letter 8 sized blue and black format. The first three issues in the new format have already appeared, volume 12 numbers 1-3.

Some Forthcoming Events

We draw your attention to the first two events on this list, FME 2001 and the IEEE Firewire workshop, which are supported by or associated with FACS. The organisers of the Firewire workshop have the following to say:

If you are looking for a case study on which to try out your favourite formal method, the IEEE standard 1394 High Performance Serial Bus might be of interest to you. We're devoting a workshop to applications of formal methods to this standard, and we'd like to see as wide a range of specification languages, validation methods, verification techniques and automated tools applied to this example as possible. This FACS-supported workshop is co-located with FME 2001 and will provide a forum for researchers and practitioners from industry and academia to discuss both completed work and work in progress related to FORMAL SPECIFICATION, VALIDATION and VERIFICATION of components of the IEEE 1394 High Performance Serial Bus. Preference is given to those works detailing some analysis of the system as well as a formal description. Full details of the workshop are available from the website http://www.cs.stir.ac.uk/firewire-workshop/

Finally, we must apologise for the extreme length of this list. It has been pruned from about three times its original length, and those that remain appear to have some relevance to formal methods. To assist you the items are in chronological order of the dates of the events.

FME 2001 "Formal Methods for Increasing Software Productivity" Berlin 12-16 March 2001	http://www.informatik.hu-berlin.de/top/fme2001
IEEE 1394 (FireWire) Workshop International Workshop on Application of Formal Methods to the IEEE 1394 Standard Co-located with FME 2001 March 2001, Berlin, Germany. Supported by BCS Formal Aspects of Computing Science and Formal Methods Europe	e-mail: firewire-workshop@cs.stir.ac.uk http://www.cs.stir.ac.uk/firewire-workshop/
2nd Australasian Workshop on Computational Logic, AWCL'01, Gold Coast, Australia, 29 January - 2 February 2001	http://www.cit.gu.edu.au/conferences/awcl01/
EUROCAST (8th International Conference on Computer Aided Systems Theory) 2001: February 19-23, 2001 Canary Islands, Spain.	http://www.ulpgc.es/congresos/eurocast2001

International Special Session on Formal Foundations of Software Evolution, 13 March 2001, Centro de Congressos do IST, Lisboa, Portugal, Co-located with the European Conference on Software Maintenance and Reengineering (CSMR 2001)	http://prog.vub.ac.be/FFSE
FEmSys'01: Formal Design of Safety Critical Embedded Systems, March, 21st - 23rd, 2001, Munich, Germany	http://ais.gmd.de/~ap/femsys
LDTA 2001: First Workshop on Language Descriptions, Tools and Applications, March 31 - April 8, 2001, Genova, Italy	http://www.cwi.nl/~markvdb/ldta/ldta.html
WADT/CoFI 2001, 15th International Workshop on Algebraic Development Techniques joint with General Workshop of the CoFI WG & CASL Tutorial, Genova, Italy, 1-3 April 2001	http://www.disi.unige.it/wadt2001/
ETAPS (European Joint Conferences on Theory and Practice of Software) 2001 April 2 - 6, 2001 Genova, Italy (includes TACAS 2001)	http://www.disi.unige.it/etaps2001/
AVoCS'01 Workshop on Automated Verification of Critical Systems, Oxford, April 19-20, 2001	http://web.comlab.ox.ac.uk/oucl/conferences/wavcs2001/
6th International Workshop on Formal Methods for Parallel Programming: Theory and Applications, to be held in conjunction with the International Parallel & Distributed Processing Symposium IPDPS 2001, April 23-27, 2001, Hyatt Regency, San Francisco, California	http://www.cs.unh.edu/~charpov/FMPPTA
8th International SPIN Workshop on Model Checking of Software (SPIN 2001), May 19-20, 2001, Toronto, Canada	http://www.cis.ksu.edu/santos/spin2001
Fifth International Workshop on Termination (WST '01), Utrecht, The Netherlands, May 20-21, 2001	http://www.math.tau.ac.il/~nachumd/wst.html
MFPS XVII, Seventeenth Conference on the Mathematical Foundations of Programming Semantics, Aarhus University, Aarhus, Denmark, May 24 - May 27, 2001	http://www.math.tulane.edu/mfps17.html
IJCAR 2001 The International Joint Conference on Automated Reasoning, June 18-23, 2001, Siena, Italy	http://www.dii.uni-si.it/~ijcar/

Petri-Nets 2001 Newcastle upon Tyne, United Kingdom, June 25-29, 2001	http://www.cs.ncl.ac.uk/conferences/2001/pn
ICACSD 2001 2nd International Conference on Application of Concurrency to System Design, Newcastle upon Tyne, United Kingdom, June 25-29, 2001	http://www.cs.ncl.ac.uk/conferences/2001/csd
Tenth SDL FORUM, Copenhagen 26th-29th June 2001	http://www.sdl-forum.org/Events/CFP.htm
International Workshop on Discrete-Event System Design, DESDes'01, June 27-29, 2001; Przytok near Zielona Gora, POLAND	www.iie.pz.zgora.pl/desdes01
Foundations of Wide Area Network Programming, 13th International School for Computer Science Researchers, Lipari Island, Italy, July 1-14, 2001	http://lipari.dmi.unict.it/Lipari/index.asp
Special session on "Advanced Techniques for Design of Fuzzy Logic Systems" at International Conference on Computational Intelligence for Modelling, Control and Automation, 9-11 July 2001, Las Vegas, USA	http://beth.canberra.edu.au/conferences/cimca2001/index.htm
FMICS 2001, 6th International Workshop on Formal Methods for Industrial Critical Systems, Paris, 16-17 July 2001	http://www.dsse.ecs.soton.ac.uk/FMICS2001
IWFM'01 5th. Irish Workshop in Formal Methods Organised by IFMSIG, Trinity College Dublin, Ireland, 16th. - 17th. July 2001	http://www.cs.tcd.ie/research_groups/fmg/IFMSIG/IWFM01/
8th International Static Analysis Symposium, La Sorbonne, Paris, 16-18 July, 2001	http://www.ens.fr/sas01/
CAV'01 Conference on Computer Aided Verification, July 18-22, 2001, Paris, France	http://www.lsv.ens-cachan.fr/cav01
ESSLLI'01, The 13th European Summer School in Logic, Language and Information, University of Helsinki Finland, August 13-24, 2001	http://www.helsinki.fi/esslli
CONCUR 2001, 12th International Conference on Concurrency Theory, Aalborg, Denmark, 21-24 August, 2001	http://concur01.cs.auc.dk/
MOCA'01, Workshop on Modelling of Objects, Components, and Agents, University of Aarhus, Denmark, August 27-28, 2001	http://www.daimi.au.dk/CPnets/workshop01/

FPL 2001: 11th International Conference on Field Programmable Logic and Applications, 27 - 29 August 2001, Belfast, Northern Ireland	http://www.ee.qub.ac.uk/dsp/fpl2001
2nd International Workshop on Distributed System Validation and Verification. Workshop held in conjunction with FORTE/PSTV 2001 August 28-31, 2001, Cheju Island, South Korea	http://dalila.sip.ucm.es/~manolo/dsvv01.html
CPN'01, Third Workshop and Tutorial on Practical Use of Coloured Petri Nets and the CPN Tools, University of Aarhus, Denmark, August 29-31, 2001	http://www.daimi.au.dk/CPnets/workshop01/
TPHOLs 2001, The 14th International Conference on Theorem Proving in Higher Order Logics, Edinburgh, Scotland, Monday 3rd - Thursday 6th September 2001	http://www.dcs.gla.ac.uk/TPHOLs2001
Visual Languages and Formal Methods (VLFM'01), Individual Symposium within IEEE Symposia on Human-Centric Computing Languages and Environments (HCC'01), Stresa, Italy, September 5-7, 2001	http://www2.cs.fau.de/VLFM01/
9th IEEE International Workshop on Petri Nets and Performance Models (PNPM 2001) Rheinisch-Westfaelische Technische Hochschule (RWTH) Aachen, Germany September 11 to 14, 2001	http://pnpm2001.informatik.rwth-aachen.de
Joint PAPM-PROBMIV 2001 Workshop (Process Algebra and Performance Modelling, Probabilistic Methods in Verification), Rheinisch-Westfälische Technische Hochschule (RWTH), Aachen, Germany, September 12-14, 2001	Email: papm-probmiv2001@ic.eecs.berkeley.edu
PVM/MPI (Parallel Virtual Machine and Message Passing Interface) 2001, Santorini (Thera) Island, Greece, September 23rd-26th, 2001	http://heliotopos.net/conf/pvm_mpi2001/index.htm
Formal Methods for Engineering Software. With courses of 5 lectures each on ASM, B, VDM, PVS, Model Checking, LF held by Abrial, Boerger, Buettner, Gorm Larsen, Gurevich, Honsell, Shankar, Udine/Italy, September 24-28, 2001.	http://www.cism.it/c2001/c07/index.htm

ASCM 2001 (The Fifth Asian Symposium on Computer Mathematics), September 26-28, 2001, Ehime University, Matsuyama, Japan	http://www.hpc.cs.ehime-u.ac.jp/~ascm
Fourth International Symposium on Theoretical Aspects of Computer Science (TACS 2001), October 29-31, 2001, Tohoku University, Sendai, Japan	http://tacs2001.ito.ecei.tohoku.ac.jp/tacs2001/

Some New/updated Products

Renew version 1.4	Java-based Petri net tool (the Reference Net Workshop). Renew consists of an editor and a simulator for high-level Petri nets.	http://www.renew.de/
LoLA Beta version	New features: High level net input, New symmetry integration techniques, State predicates, Exit values, Extended CTL, Removal of isolated places	http://www.informatik.hu-berlin.de/~kschmidt/lola.html
IFAD VDM-SL Toolbox version 3.6 and VDM++ Toolbox version 6.6	Improved VDM debuggers, New Corba-based Application Programmers Interface for VDM Tools, VDM++ to Java code generator, Enhancements to Rose-VDM++ Link	http://www.ifad.dk/Products/vdmtools.htm
Moses Tool new release	Moses is a Java-based discrete-event modelling and simulation environment facilitating support for Petri net dialects and other visual modelling notations	http://www.tik.ee.ethz.ch/~moses/download.html
CPN-AMI 2.5	A major release with about 60 structured services for Coloured Petri nets. Documentation and tutorials.	http://www.lip6.fr/cpn-ami http://www-src.lip6.fr/logiciels/mars/CPNAMI/history.html

Some Posts

CWI: PhD student funded by the Netherlands Organization for Scientific Research to work on Coordination-based Parallel Constraint Solving.	Farhad.Arbab@cwi.nl
The Departement of Computer Sciences of the Université Libre de Bruxelles is seeking two researchers in CS for the Group Distributed Systems.	http://www.ulb.ac.be/di/projects/proj_distSL.htm
University of Birmingham, UK School of Computer Science Postdoctoral Research Fellow. Postdoctoral Research Fellow to work on the project 'The Feature Construct in Programming and Specification Languages', funded by EPSRC and British Telecom, coordinated by Dr. Mark Ryan and Dr. Marta Kwiatkowska.	www.cs.bham.ac.uk/~mdr/fc www.cs.bham.ac.uk www.cs.bham.ac.uk/~mdr/fc
UNU/IIST (United Nations University International Institute for Software Technology) has a number of vacancies for research fellows.	http://www.iist.unu.edu.
City University of New York Graduate Center Ph.D. Program in Computer Science. Professor. The CUNY Graduate Center seeks a Professor with outstanding record or Associate Professor with great promise. Program is looking for an individual who has had major impact in the field, is active in preferably more than one area, has a consistent grant record, and some of whose work is applied. A distinguished candidate of substantial merit with an international reputation may be nominated as Distinguished Professor.	Rohit Parikh RIPBC@CUNYVM.CUNY.EDU
SRI International: post-doc researchers in formal verification to work at its Cambridge Computer Science Research Centre in the UK. The initial requirement is on a three-year project to apply formal techniques in the construction of intrusion tolerant systems http://dtsn.darpa.mil/iso/programtemp.asp?mode=346 and in particular to investigate proof-based methods for on-the-fly intrusion detection.	Applications, including CV, should be sent to careers@cam.sri.com. Informal enquiries can be directed to Dr. Roger Hale (roger.hale@cam.sri.com).

The Intel Texas Development Center (TDC) in Austin is looking for outstanding candidates to join its Formal Verification group. The ideal candidate will have a combined knowledge of formal methods (preferably model checking and/or STE techniques), tools development, and a good understanding of hardware design and micro architecture.	If you are interested, please contact: Flemming.L.Andersen@intel.com or call: (512) 314-0394 PS. If you call from abroad: The Austin time zone is Greenwich standard time -6 hours
University of Wales Swansea, Department of Computer Science: Applications are invited for the vacancy of Lecturer in the Department of Computer Science. The Department has a strong commitment to teaching and research in computing that is mathematically well founded.	Email: personnel.mailbox@swan.ac.uk j.v.tucker@swan.ac.uk http://www.swan.ac.uk/personnel
The department of Computing Science of the Technical University Eindhoven is looking for 2 Ph.D. candidates for a project at the intersection of coordination languages, component-based engineering, software architecture and dependable systems. (Vacancy no. 32853)	http://www.win.tue.nl
VERIMAG is seeking an expert SW engineer to work on "Expresso", a joint project with IRISA (Rennes, France) and the industrial partners AONIX, Thomson and SiliComp. The goal of Expresso is to produce a set of software tools for programming, debugging, analyzing and running "real-time and embedded" Java programs.	VERIMAG : http://www-verimag.imag.fr Email: Joseph.Sifakis@imag.fr or Sergio.Yovine@imag.fr.
Faculty Positions --- National University of Singapore. The Department of Computer Science has about 80 faculty members with doctoral degrees. Research interests in the Department cover all major areas in computer science. There are 17 research laboratories equipped with state-of-the-art computing facilities.	http://www.comp.nus.edu.sg/cs/index.html Potential candidates with a PhD who are interested in formal methods can make an initial contact with: Jin Song DONG <dongjs@comp.nus.edu.sg>

IFAD is looking for high-quality candidates to work in the Methods & Tools department: Providing consultancy services and training courses in design; modelling and validation using UML and the VDM technology; Participation in customer-specific development projects; VDMTools product development; VDMTools Proof Extension R&D project; Work with Boeing on the Joint Strike Fighter (JSF) project	http://www.ifad.dk/ email: Peter.G.Larsen@ifad.dk
The Institute for Software Science at the University of Vienna, Open Research Position for PHD Students about UML-centric and Performance-Oriented Software Development Environment for Distributed and Parallel Systems (working language: English)	Email: tf@par.univie.ac.at http://www.par.univie.ac.at/
Universität Bremen: post-docs and people working towards their PhD; Formal Methods and application to embedded systems: a project AWE (Abstraction and Reuse of Formal Program Developments) using transformational development	http://www.tzi.de/biss/jobs_e.html http://www.tzi.de/~cxl/proj/awe.html
Pacific Software Research Center, Oregon Graduate Institute of Science & Technology. Postdoctoral researchers to work on Programatica, an environment for the simultaneous development of systems and formal models of systems that leverages functional programming, theorem proving, and other applied formal methods.	http://www.cse.ogi.edu/PacSoft/
Institute of Computer Science at Augsburg University: a position in the DFG research project Decomposition of Signal-Transition Graphs for the Synthesis of Asynchronous Circuits	http://www.e-technik.uni-kl.de/beister/wollo.htm

School of Computing, Information Systems and Mathematics (SCISM), South Bank University, London,UK; A PhD studentship in the area of Application-Specific High-Performance Processors. Successful applicants could join the newly formed Centre for Applied Formal Methods. The fields of interests include: formal synthesis methods for regular processor arrays; implementing algorithms on VLSIs and FPGAs; hardware design, hardware-software co-design; reconfigurable architectures and custom computing systems on FPGAs; applications in multimedia, signal, image and video processing.	http://www.scism.sbu.ac.uk/ http://www.scism.sbu.ac.uk/ERA/dash.html email: plakst@sbu.ac.uk
Software Verification Research Centre (SVRC): Research Officers, Senior Research Officers or Research Fellows are sought. Please quote Reference Number 00101	email svrc@svrc.uq.edu.au
BRICS - Basic Research in Computer Science at the Universities of Aarhus and Aalborg, Denmark. This is a call for applications for: PhD admission and PhD grants, Marie Curie Training Site Fellowships, and Research Positions. -	www.brics.dk/Positions
Research Fellowships within the School of Computing, Information Science and Mathematics at South Bank University, London.	Email: robin.whitty@sbu.ac.uk humanres@sbu.ac.uk
University of Newcastle upon Tyne, Department of Computing Science. Two Research Associate posts and a PhD studentship on an EPSRC-funded project "Behavioural Synthesis of Systems with Heterogeneous Timing" (BESST) for a period of 36 months, commencing 1st April 2001.	Email: alex.yakovlev@ncl.ac.uk
Research Assistant in Formal Methods, School of Mathematical and Computing Sciences, Victoria University of Wellington, New Zealand	http://www.cs.waikato.ac.nz/Research/fm/isurf.html email: lindsay@mcs.vuw.ac.nz
Motorola is looking for several exceptional candidates to join our Formal Methods / Formal Verification (FM/FV) group at Motorola's Somerset Design Center in Austin, Texas.	Email: r3185c@email.mot.com

FME News

Peter Lucas has stepped down as chairman of FME and John Fitzgerald has been unanimously appointed to take his place. Nico Plat and Kees Pronk have been unanimously re-elected as secretary and treasurer. Peter Lucas has been nominated as the first honorary member of FME.

Special issues of three journals are appearing with material from FM99: Formal Aspects of Computing, issues 12/3 and 12/4, one with papers extending some presented at FM99 and the other with a paper on the tools exhibition, Formal Methods in System Design 17/3, and IEEE Transactions on Software Engineering 26/8.

FME 2001 will take place at Humbolt University in Berlin (http://www.informatik.hu-berlin.de/top/fme2001). Invited talks are to be given by Daniel Jackson, Jayadev Misra and Simon Peyton-Jones. At the time of writing there were still vacancies at the tools exhibition. For details contact Paul.Mukherjee@ifad.dk . Registrations for the tools exhibition should reach him by 16th February 2001.

FME 2002 will be organised as part of the three-yearly Federation of Logic Conferences (FloC). FloC comprises CAVE, FME, LICS, CAD, ICLP, RTA and TABLEAUX. It is a two-week event during which FME will take place in the first week, in Copenhagen. There is a proposal to host the subsequent FME 2003/4 in Italy.

BCS News

BCS is going to completely reorganise following a survey of views from Branches and SIGs. Apparently they unanimously feel remote from and poorly serviced by the central organisation. Many IT professionals regard BCS negatively. The firm who carried out the survey remarked "rarely had they found an organisation where negative criticism was so universally consistent". So the problems are acknowledged and as a solution a restructuring for BCS HQ around four new boards is proposed. The plan is to launch this in November 2001 with a three-year implementation. There has been much lengthy discussion and objections raised to the details of this, and there promises to be much more before any changes take place.

There is a £0.5M project "Web Initiative". This could impact FACS because the FACS site has links to the BCS site. I imagine the policy might have rules like "no BCS site should have direct links to commercial sites", but there could be others more problematic. It is early days in the initiative yet. The Technical Board recognised that "SIGs will resist any attempt to dominate".

BSI committees

The Technical Board wants SIGs (like FACS) to tell them on which BSI committees the BCS should be represented. The current list is coming out shortly. It costs the BCS money to have a representative on a BSI committee, so if there is no support from a SIG, the representative will be withdrawn.

FACS Coordinates

FACS Officers

Chairman	To be filled	
Treasurer	Jawed Siddiqi	J.I.Siddiqi@shu.ac.uk
Committee Secretary	Roger Carsley	roger@westminster.ac.uk
Membership Secretary	John Cooke	D.J.Cooke@lboro.ac.uk
Newsletter Editor	Tim Denvir	t-denvir@dircon.co.uk
Liaison with BCS	Margaret West	m.m.west@hud.ac.uk
Liaison with FME	Tim Denvir	t-denvir@dircon.co.uk
Liaison with Z User Group	Kevin Lano	kcl@dcs.kcl.ac.uk
Liaison with BSI	Ann Wrightson	annw@ontopia.net
Other Committee members:	Paul Boca, Olwen Morgan, Chris Roast, Mike Stannet	

FACS Central

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Newsletter Contributions

Send them by email in an attached file in LaTeX, MS Word or Rich Text Format to Tim Denvir, coordinates above. Short items such as news of a new product can be embedded directly in the message if you prefer.