Computing Science GLASGOW

Newsletter

The Queen's Anniversary Prizes for Higher and Further Education 1998

UNIVERSITY of GLASGOW

Computing Science Open Day 2000
http://www.dcs.gla.ac.uk/entry/

Open Day 2000

Well there you are, it's been and gone and an overwhelming number of prospective students came by. Around 1000 visitors found their way to Level 7 to be met by the gallant team representing the Department.

A continuous visual display accompanied by lively music gave life to the foyer and we had a demonstration from the Haptic team and our new web site on show.

"We were most impressed with the attention given yesterday bearing in mind the vast numbers of prospective students attending the Open Day. Thank you," emailed some satisfied visitors.

Talk of the day was the new additional requirement of a pass in Higher Mathematics for first year entry next session. This information gave many a visitor pause for thought.

The sharp eye and gymnastics of Jon Ritchie our resident photographer captured a great set of pictures.

Simon Gay was there as our star presenter with his enigmatically titled talk "SORTED" about algorithms but what about the rest of the team? ...have a look at ......
http://www.dcs.gla.ac.uk/visit/OD2000/
and see if you can spot
Quintin Cutts, Ray Welland, Rob Irving, Simon Gay, Myra Smith, Jon Ritchie, Gary Gray, Mark Meenan, Paul Philbrow, Barbara Wiseman, Maryln McGee, Andrew Crossan Fatima Beltagui, Donald McVicar, Claire Quigley, Chris Holguin, Scott Greig, BO techs, Jacqui Brannan.

Well done and thanks to everyone who made a gem of a day for the Department! But next time can we have more help please?
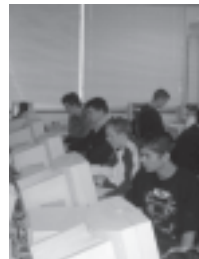
Dr Evgeny Selensky

I started working here as a research assistant on the 12th of September. So far, things have been going quite smoothly and I am making myself at home here in Glasgow and in the Department.

I graduated from the Moscow Bauman University, Moscow, Russia. My first degree is in Applied Mechanics (Civil Engineering).

I earned my Ph.D. for the development of new algorithms to simulate the behaviour of robotic systems (manipulators and walking vehicles) from the Moscow State University named after Lomonosov.

In particular, I proposed fast and economical modifications of path-planning algorithms, an easy method to take into account obstacles in the workspace of a robot, a procedure of finger motion control so that objects are grasped securely by the manipulator. I also implemented the regular gait synthesis approach to formalize the moves of the human fingers manipulating objects and gave practical recommendations for the synthesis of a stable gait of a six-legged walking vehicle inside horizontal cylindrical pipes.

My research here will be dealing with constraint satisfaction. I am working with Dr Patrick Prosser as the principal investigator. The main objective of the research is to study the influence of problem reformulation on the effectiveness of problem solution.

It will be interesting to me to view theoretical and practical problems at a different angle in terms of constraint satisfaction. A lot of fascinating work is ahead.

I am in F151. My extension is 0989, my email is 'evgeny'.

IT Course students get a hearty welcome

Since the middle of September the MSc IT course has been in full swing. Anyone who has visited Level 7 in Boyd Orr will have noticed the air thick with concentration as students endeavour to gain new Java skills.

We have 32 international students with us this year from all over the globe: China Spain, Malaysia, Korea, Hong Kong, Pakistan, Netherlands and Germany.

Especially welcome this year are our first IT students from Azerbijan and Norway (although we have had many undergraduate Norwegians, this is our first in MScIT)

All of the overseas students were welcomed to Glasgow with a genteel buffet reception and then led astray at the whole class reception in the Queen Margaret Union, the annual event that gives the student a chance to relax and talk to their classmates. The event was organised expertly as ever by Teresa with the able assistance of Tracy whose barkeeping skills were very much in appreciated during the evening.

Level 1 Review Remit

Teaching Committee, at its meeting on 30 June 2000, decided that a review of Level 1 should be undertaken during session 2000-2001, with a view to implementing any changes at the beginning of session 2001-2002. A similar review of Level 2 would follow during 2001-2002, with reviews of Levels 3 and 4 following in sequence.

Teaching Committee does not envisage this review as a major overhaul of the curriculum. Rather it is intended to address any problems and weaknesses that have been identified during the four years that the current modular system has been in operation, taking into account developments both inside and outside the Department. These include the increase in our student numbers, most dramatic in session 1999-2000, the disappointing pass rates in some of our modules, again accentuated in 1999-2000, and the recent proposals of the University's Modularisation Working Group, accepted by Senate in May 2000.

Four aspects of the Level 1 Curriculum have been identified for discussion, namely:
- Structure: to consider the number, size, and shape of modules, timing of degree examinations, progression requirements.
- Technical content: to consider whether adjustments need be made to the technical content of Level 1; a particular issue that should be discussed widely in the Department is the choice of programming language at Level 1 (bearing in mind the substantial implications for the entire curriculum of any change from the status quo).
- Delivery: to consider the mix of lectures, tutorials, and laboratories, the assessment model, student support mechanisms, etc.
- Motivational content: in the light of our experience of poor student motivation, to consider what adjustments could be made to Level 1 to alert all students to the challenge of computing science and to encourage them to engage fully with it.

A Working Group has been set up comprising Ray Welland, Quintin Cutts, Simon Gay, and Rob Irving. The Group will consult widely during its deliberations, and in particular, a Staff Meeting will be called to discuss the programming language issue. A report will be submitted to Teaching Committee in November 2000, with a view to submitting proposed changes to the appropriate Faculty body in January 2001, for implementation from October 2001.

Cosmopolitan comes to the Department - all the way from Russia.

As we all know this is a very style conscious department, at the leading edge of fashion. Even so I did not anticipate that one of a recent group of Russian visitors would be journalist from the Russian Cosmopolitan magazine.....who, seeing the induction lecture for new staff , rushed in and took a myriad of photos of a somewhat bemused group. Peter was the star of the event and what can I say.... that white t-shirt might just appear on the front page in Moscow.

Our new staff member from Russia, Evgeny Selensky, was also ensnared by the news-hungry group who besieged him with questions and tape recorders. He couldn't have known what was in store for him when he generously agreed to help out but he took it all with a grin. Thanks Evgeny !

Just in case you are beginning to ask the question Why? ..the visit had a very serious purpose: to publicise our university and department throughout Russia. But there you are... recruitment can have its lighter side.

Alison

University Dates Online: Session 2000-2001

Dates of terms, University Committees, etc now available on h t t p : / / www.gla.ac.uk/ reference/calendar2000-2001.html.

Lilybank Block Bookings

Please let me know of any block bookings for rooms in Lilybank you require for next sessione e.g. *GIST every Thurs 4.00pm.*

I would appreciate a response as soon as possible. All other room bookings should be made by the general office.

Many Thanks

Jacqui

Cakes Talks

I am taking charge of the organisation of the cakes talks for the next year. You are very welcome to contribute and talk about your research activities in a broad context, or any other topic relevant to the department community as a whole This could be also the opportunity to have some feedback and perhaps some new bright ideas. The talks need not to be so technical, you can talk about the framework, the motivations, the impact etc (including political issues :)

Thanks and looking froward to hearing from you soon.

Naoufel

Tell us all about it!

The Newsletter is here to keep everyone up-to-date with what's going on around the Department but we can;'t do it without your help. So if you have a new grant, a forthcoming workshop, some information to pass on, or just want to share some gossip why not email <newsletter@dcs>

Stupid Sort: A new sorting algorithm

You certainly know several sorting algorithms such as, Selection, Bubble, Quick, Merge, Binary, Shell and Heap sort. All of these algorithms belong to one of the two main groups: (1) the algorithms using recursive concepts, $O(n\log n)$, and (2) the algorithms employing two nested loops, $O(n^2)$, where n is the number of elements in the list to be sorted.

I have a new sorting algorithm and named it *Stupid sort*!. Stupid sort is an algorithm out of these two groups, mentioned above, which works slightly similarly to Bubble sort. Here is Stupid sort in Pascal notation:

Type ATYPE=array[1..n] of integer;

Procedure StupidSort(var A:ATYPE; n: integer);

Var i : integer;

Begin

  i:=1;

  While (i<n) do

    If A[i]<A[i+1] then

      Begin swap(A[i],A[i+1]);

          i:=i-1;

          If i=0 then i:=1;

      End

    Else i:=i+1;

End;

It is not recursive and also uses only one loop! So, it seems to be an algorithm of $O(n)$, but it is, I think, of $O(>n^2)$. Although it is simple for programming (especially when implemented in hardware), it is slow and stupid in running.

Can anybody find its complexity order?

Hamid (Room G091)

New Phd Students

Name	Supervisor
Al-Dubai, Ahmed	Mohamed Ould-Khaoua
Alsadi, Jehad	Mohamed Ould-Khaoua
Awwad, Ahmad	Mohamed Ould-Khaoua
Baillie, Mark	Keith Van Rijsbergen
Banda, Macdonald	Joemon Jose
Cooke, Gordon	Malcolm Atkinson
Coull, Alasdair	John Patterson
Cunei, Antonio	Malcolm Atkinson
Darroch, Iain	Malcolm Atkinson
Darbari, Ashish	Tom Melham
Galani, Areti	Matthew Chalmers
Girard, Agathe	Rod Murray-Smith
Huczynski, Gregory	Peter Dickman
Jamil, Asif	Paul Siebert
Japp, Robert	Malcolm Atkinson
Khonsari, Ahmed	Mohamed Ould-Khaoua
MacLeod, Donald	Paul Siebert
McGookin, David	Stephen Brewster
Mcsorley, Gareth	Malcolm Atkinson
Min, Geyong	Mohamed Ould-Khaoua
Morrison, Alistair	Matthew Chalmers
Randell, Rebecca	Chris Johnson
Ross, Greg	Matthew Chalmers
Scott, Sandy	Rob Irving
Sheikh-akbari, Akbar	Lewis Mackenzie
Speirs, Fraser	Chris Johnson
St. Ville, Lyndell	Peter Dickman
Tenzekhti, Fathi	Mohamed Ould-Khaoua
Troup, Timothy	Malcolm Atkinson

Absences from Department, and Holidays

All dates are inclusive.

mth of Oct	Dales, Michael	Xilinx Edinburgh - email michael.dales@xilinx.com
F 1 Sept - F 1 Dec	Evans, Huw	SUN Microsystems, Boston
M 25 Sept - W 11 Oct	Gray, Phil	HUC2K Bristol then IBM TJ Watson Center
M 24 July………	Jeacocke, John	Sick leave
30 Sept 00 - 30 Jun 2001	Johnson, Chris	Leave of absence
M 2 - Th 5 Oct	Johnson, Chris	EPSRC/ESRC Sussex then Brussels Eurocontrol
11 July - 31 Dec 2000	Melham, Tom	Leave of absence - USA
prov 2 wks end Oct	Mitchell, Alison	Holiday
1 Oct 99 - 30 Sept 2000	O'Donnell, John	Leave of absence
T 5 - W 27 Sept	Printezis, Tony	POS9 Norway, Holiday & mtgs USA
F 13 - F 20 Oct	Printezis, Tony	OOPSLA 2000, USA
T17- F 20 Oct	Ritchie, Jon	Holiday
1 Sept 00 - 31 Aug 2001	van Rijsbergen, Keith	Leave of absence

Dates for holidays and absences from the Department should be emailed to <alexa>, and noted on the whiteboard in the entrance hallway of House 17. (See also Policy on Absences … on HoD noticeboard.)

The Newsletter is published every Monday during term time. Items for inclusion should be emailed to newsletter@dcs.gla.ac.uk before noon on the Friday before publication. All other mail to jon@dcs.gla.ac.uk