

1st UK GPU Developers Conference

Mike Giles

MRSN

The Many-core and Reconfigurable Supercomputing Network is a network of UK researchers using FPGAs (Field-Programmable Gate Arrays) and GPUs. The FPGA community has existed for a number of years and is well connected. The GPU community is comparatively new, and MRSN was an EPSRC-funded initiative (led by Imperial, Manchester, Oxford and Queen's University Belfast) to develop the GPU community and integrate it with the FPGA community.

There is a website at:

<http://www.oerc.ox.ac.uk/research/many-core-and-reconfigurable-supercomputing>
and a mailing list at <http://www.jiscmail.ac.uk/MRSN>

Related to MRSN is a conference called MRSC (Many-core and Reconfigurable Supercomputing Conference) which will be held in Rome in March/April 2010.

www.gpucomputing.net

www.gpucomputing.net is a brand new initiative to build a worldwide community of researchers in GPU computing. It is hosted by UIUC (University of Illinois at Urbana-Champaign) and initially sponsored by the NVIDIA Centers of Excellence, but it is not tied to either NVIDIA or CUDA.

I am the “champion” for the Computational Finance section, and Graham Pullan is the champion for the CFD section.

Future?

GPU computing is growing very rapidly, worldwide and within the UK. The turnout at this conference has been very encouraging, and Graham Pullan is already planning to hold the next one in Cambridge. The remit will be broadened to include all of GPU computing (including OpenCL in particular) but it will probably retain a focus on the programming side, and will not aim to compete with traditional “academic” parallel computing conferences.

In the meantime, we see benefits from continuing to build the GPU community in the UK, to cover issues like:

- what seminars are being given on GPU topics?
- what have people found to be the pros and cons of OpenCL versus CUDA?
- what course materials are available?
- where can I find example codes relevant to my needs?
- which universities are using CUDA/OpenCL and where are their web-pages?
- who is running courses for the whole UK community?
- what’s the gossip on the latest hardware?

Do you agree? And if you do, how should we proceed?

One option is to continue to use MRSN, both the mailing list and the website. Another is to create a UK section within www.gpucomputing.net. Or we could create an entirely new entity.

What do you think?

(My own feeling is that www.gpucomputing.net may be the way to go, partly because that site has all of the capabilities we need so doing it will require minimal effort. However, this is a democracy in which everyone who is prepared to put some effort into it has a vote!)

Please think about it and send me your feedback on this, and also on any changes you would like to see in next year’s conference, by emailing me at mike.giles@maths.ox.ac.uk.