



## Science Symposium GPGPU Techniques for Medical Image Processing and Simulation

CSIRO and the IEEE Queensland Engineering in Medicine and Biology Society (EMBS) are proud to announce a Science Symposium on GPGPU Techniques for Medical Image Processing and Simulation, on the 30<sup>th</sup> March 2009.

Due to huge increases in the processing power of modern graphics cards, General Purpose computation on Graphics Processing Units (GPGPU) techniques have become widely used to solve computationally expensive problems often over massive data sets.

The upcoming Science Symposium offers researchers an opportunity to see the potential for how GPGPU techniques can be leveraged in their own imaging and simulation research via technical briefs and real-world examples.

At the end of the Symposium, delegates should have a solid understanding of GPGPU techniques, including preferred hardware and software platforms.

Our keynote speaker, Dr. Mark Harris, Senior Developer Technology Engineer at NVIDIA, will speak about the latest NVIDIA hardware architecture and the CUDA programming platform.

We are seeking submissions of 250 word abstracts from delegates wishing to present oral papers on GPGPU based techniques covering (but not limited to) the following topics:

- Image processing and registration
- FEM and soft tissue simulation techniques
- Large data set visualisation
- Image guided surgery
- Preoperative surgical planning
- Tomographic reconstruction
- Ultrasound simulation

Please submit completed abstracts before 1<sup>st</sup> March 2009 via email to [josh.passenger@csiro.au](mailto:josh.passenger@csiro.au)

We look forward to seeing you and as seats are limited, we advise early registration to avoid disappointment.

<b>When</b>	30 <sup>th</sup> March 2009 9:00am – 4:00pm
<b>Where</b>	Level 2 UQCCR Building 71/918 Royal Brisbane and Women's Hospital Herston QLD Australia
<b>Cost</b>	Free (lunch and refreshments provided)
<b>Registration</b>	Please register your intention to attend by 15 <sup>th</sup> March 2009 to <a href="mailto:Lauren.Anderson@csiro.au">Lauren.Anderson@csiro.au</a> or call (07) 3253 3600