Report on GFX 2011 – Advanced Graphics Workshop

IEEE Consumer Electronics Society, Bangalore Chapter
(http://ewh.ieee.org/r10/bangalore/ces)

Background

The Advanced Graphics Workshop was conceptualized by the IEEE Consumer Electronics Society, Bangalore chapter in 2011, as a result of discussions with key partner companies working in the field of Consumer Electronics in Bangalore. OpenGL, Graphics, and Consumer Electronics are becoming closely linked, with the emergence of integration of high quality graphics into mobile devices like the iPhone/ iPad and the myriad Android tablets in the CE market. The most important feedback was to provide a hands-on experience to participants rather than just theory, thus a great emphasis on setting up a scalable lab experience was required.

Workshop summary

The entire event was coordinated with the IEEE via online setups. All event information, pre-registration, and feedback forms, were made available to participants at the below link.
http://ewh.ieee.org/r10/bangalore/ces/gfx2011.html

The workshop was conducted on December 3rd, 2011, at Hotel Seven. 34 professionals from across the industry attended the event. Bhaskar Karmakar (Chairman, CE society, 2011), Arun Naik (Treasurer, CE society, 2011) represented the CE chapter at the event.

The agenda of the event is available in the below web page:
http://ewh.ieee.org/r10/bangalore/ces/gfx2011/gfx2011_update2.pdf

Keynote

The keynote was delivered by Prof. Vijay Natarajan from Computer Science & Automation Department/ SERC, IISc - a noted researcher in the Visualisation space. The talk was titled “Graphics – from CPU to GPU” and covered the development of Graphics technologies from the early days of CAD, animation, and the current trends on Vertex/Texture complexity. A summary of recent research outputs from IISc was covered. Overall, the inaugural talk helped set the tone of the workshop very well. Bhaskar Karmakar, IEEE CE chair 2011, felicitated Prof. Vijay.

Labs and Workshop

The hands-on workshop started after the inaugural lecture. The lab setup for the workshop was done in a completely online, scalable way – by using the facilities at the below site.

http://www.gpupowered.org

The workshop covered Graphics theory and implementations, and specification aspects, apart from hands-on labs which were implemented in the online labs, by all the participants. The participants were able to immediately appreciate the API implementation, the parameters, and the syntax of the various APIs, by actually implementing and debugging various problems. Overall 5 labs were implemented, debugged and completed by the participants, and more than 10 pre-built labs were referred to. The workshop was coordinated and conducted by Prabindh Sundareson, IEEE CE Chapter.

IEEE/ company attendance

A brief breakup of the event attendance and participant companies is below. About 10% of the audience, were IEEE members.

• Intel – 35%, • TI – 10%, • Qualcomm – 10%, • Siemens – 10% • Ittiam – 5%, • LG Soft – 5%, • Others – 25% (HCL, Wipro, Bally, Researchers, Cortino)

Khronos Coverage

Khronos.org, the standardization forum for Graphics technologies, included this set of labs in their news section at,
http://www.khronos.org/news/archives/2011/11

Photos

A photo stream of the event is available online at,
http://www.flickr.com/photos/71344617@N02/

Random Feedback

What excited you today in this workshop ? / Feedback

- "The simple yet very useful to understand the openGL labs. The best thing happened was it was arranged in between theory sessions so that we can immediately link/map the understanding to practicals. Unlike most of the trainings it was not arranged at the end, for which most of the people neglect the lab sessions. The theory sessions also touched the basics of 3-D pipeline which was useful to me. The all graphics techies asking various questions made workshop really interesting. Thanks for arranging it... "
- "The future of Animation and Gaming looks amazing in the hands of these wonderful computer graphics heroes. I was dying to learn about computer graphics from a very long time, finally happened. Overall it was very satisfactory. The talk was near perfect in terms of most aspects."
- "If the same content was presented over two days instead of one very long day, it would have been better. 8 30 to 5 30 seemed too long. This is just a ssuggestion,"