



Report on GFX 2012 – Advanced Graphics Workshop, May 26, 2012

IEEE Consumer Electronics Society, Bangalore Chapter

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. The first workshop was held in Dec 2011, and a report on that is here [http://ewh.ieee.org/r10/Bangalore/ces/CE_Bangalore_Report_GFX2011.pdf]

This report summarises the Second workshop in this series, GFX 2012.

Workshop summary

The entire event was coordinated with the IEEE via online setups. All event information, pre-registration, and feedback forms, were available to participants at the below link.

<http://ewh.ieee.org/r10/bangalore/ces/gfx2012.html>

The workshop was conducted on May 26, 2012, at Hotel Seven. Arun Naik (Treasurer, CE society) represented the CE chapter at the event, and delivered the vote of thanks, and distributed the certificates.

The agenda of the event is available in the below web page:

http://ewh.ieee.org/r10/bangalore/ces/gfx2012_update.pdf

Labs and Workshop

The lab setup for the workshop was done in a completely online, scalable way – by using the facilities at <http://www.gpupowered.org>

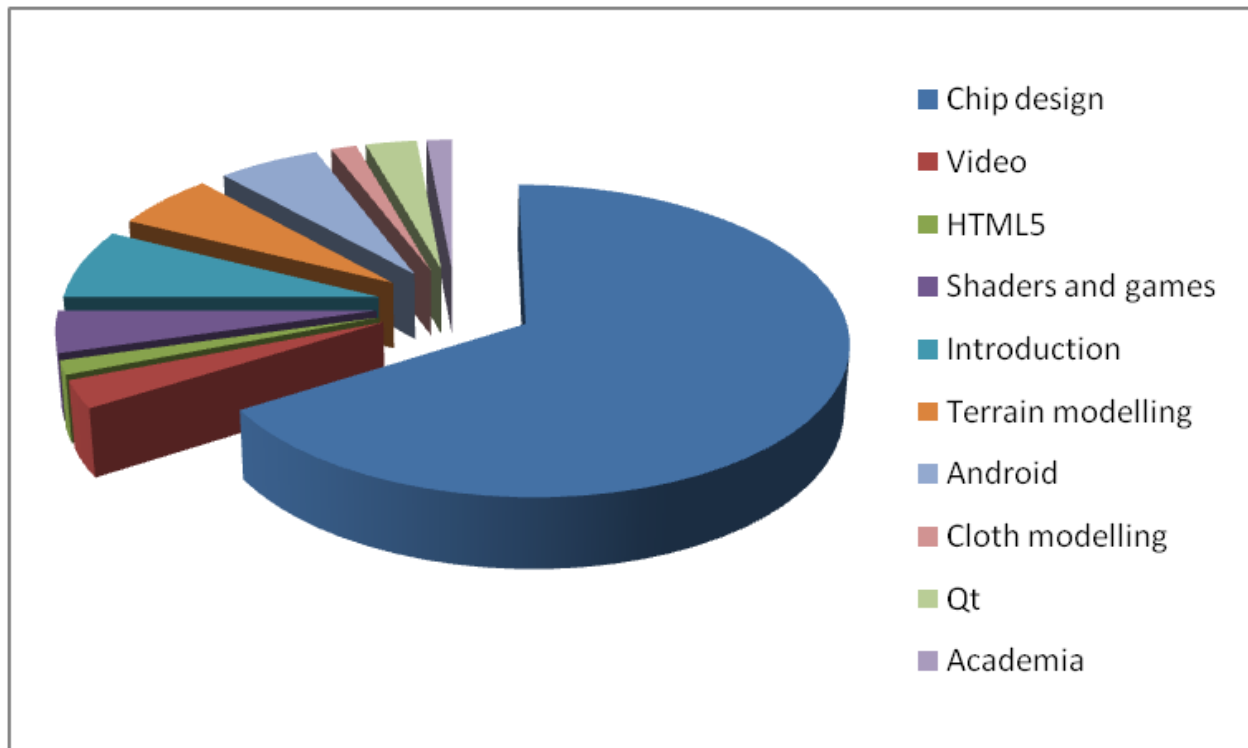
The workshop covered Graphics theory and implementations, and specification aspects, apart from hands-on labs which were implemented in the online labs, by all the participants. The participants were able to immediately appreciate the API implementation, the parameters, and the syntax of the various 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

An analysis of key industry requirements from a technical perspective, in the Graphics field has not been attempted so far, to our knowledge. To enable this, an attempt has been made this time to make a brief breakup of participants from the industry and their requirements. This breakup is given in below chart.

The chart is interesting because in both the workshops, a majority of the participants were from the Chip Design Industry, and the CAD and animation industries have not been so interested. This shows that the CAD and animation industries may be a big consumer of Graphics, but not many teams in Bangalore work on the core OpenGL Graphics drivers. It also shows that at the application level there is a diverse set of requirements. This information and other insights gathered from participants will help us run our future technical events of the CE Chapter.





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/sets/72157629919307622/>

Feedback From Participants

More than 90% of the participants rated the session as Good. Selected feedback from 2012 below:

What excited you today in this workshop ? / Feedback

- "Concepts covered and training material"
- "understanding aspects of GPU arch with hands on examples"
- "The Hands-on session"

Summary:

Overall, the second Advanced Graphics Workshop was successfully held, and a lot of insight has been generated into the requirements of the CE technical community. Thanks to the IEEE CE chapter execom, the IEEE execom, and Bhaskar (Chairman, CE Chapter) and Arun Naik (Treasurer, CE Chapter) for spending significant time on this and supporting this activity.

- Prabinth Sundareson, IEEE CE Bangalore Chapter