# GFX2015 - Advanced Graphics Workshop, June 27, 2015, Bangalore Summary Report

## **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 previous workshop reports are linked below:

- $1.\ {
  m http://ewh.ieee.org/r10/Bangalore/ces/CE\_Bangalore\_Report\_GFX2011.pdf}$
- 2. http://ewh.ieee.org/r10/bangalore/ces/ieee\_ce\_gfx2012\_report\_v1.pdf
- 3. http://ewh.ieee.org/r10/bangalore/ces/gfx2013 report.docx
- 4. http://ewh.ieee.org/r10/bangalore/ces/gfx2014\_report.pdf

This report summarises the fifth workshop, GFX 2015.

## **Workshop summary**

The workshop was conducted on June 27<sup>th</sup>, 2015 at Hotel Citrus, Cunningham Road, Bangalore. The Theme of the workshop was "**Graphics for Automotive Industry**" and focused on theory and implementations around frameworks like Android, Qt5, Wayland commonly found on Automotive software stacks.

A key point in this year's event was the fact that Khronos had shipped OpenGL and EGL API Specification cards free for the workshop purposes. This was provided to the participants.

## **Labs and Workshop**

The lab setup for the workshop was done using completely opensource frameworks like GLFW3, and APIs using OpenGL ES2 using standalone tools created for this purpose. References from <a href="http://www.gpupowered.org">http://www.gpupowered.org</a> were used for creating the example sessions, taking cues from previous years events.

The workshop covered Graphics theory and implementations, and specification aspects, apart from hands - on labs which were implemented in the users machines 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 9 labs were implemented, debugged and completed by the participants.

The workshop was coordinated and conducted by Prabindh Sundareson, IEEE CE Chapter. At the end of the workshop, certificates were distributed to the participants.

#### Feedback from the participants:

All the participants appreciated the ease of learning provided by the Lab sessions, and most felt that this should be conducted over a period of 2 or 3 days.

#### Photos from the event:

Some of the photos are available at:

https://www.flickr.com/photos/prabindh/19021202990/in/dateposted-public/

## **Acknowledgements:**

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