Realizing the Compute Potential of the Mobile GPU

Audience: This panel is designed to benefit advanced programmers and thought leaders who want to learn about the latest advances and future directions of mobile GPU computing to deliver the most balanced, optimized, and efficient experiences using the full capabilities of today's smartphones and tablets.

Abstract: Computing is evolving as smartphones and tablets increasingly become primary entertainment devices. This shift requires greater performance from mobile processors to deliver the same quality experiences that a PC or gaming console does, but without compromising battery life in a more compact mobile device form factor.

The mobile GPU is offers tremendous computing potential to enable unprecedented experiences from vision for augmented reality, to game physics, geometry creation and image processing. This panel, composed of leading mobile graphics experts from Qualcomm, ARM, Google, Intel, Lytro and Pelican Imaging will cover the newest and best ways advanced programmers can take advantage of the massive computing power of today's mobile GPUs. The discussion will cover the GPU and system architectures, as well as compute APIs like OpenCL and Renderscript to enable GPGPU. The panel will address the opportunities and challenges of GPU compute, the architecture required to support it, and their vision for where it will take us.

Designed for advanced programmers, as well as thought leaders in the industry, attendees will leave this session with a clear understanding of the latest developments in mobile GPU compute. Beyond what is possible today, industry experts on this panel will explore where mobile graphics are headed and discuss their companies' respective visions for the future of mobile compute.

Attendees will have an opportunity at the end of the panel to pose questions.

Moderator:
Patrick Moorhead, Founder & President, Moor Insights & Strategy

Panelists:

Kurt Akeley
Chief Technology Officer, Lytro

Jason Sams
Renderscript Technology Lead, Google

David Blythe
Intel Fellow, Intel

Dave Shreiner
Director Graphics & GPU, ARM

Eric Demers
Vice President Engineering, Qualcomm

Kartik Venkataraman
Co-Founder & CTO, Pelican Imaging