

3DV 2018

International Conference on 3DVision
Verona, Italy
September 5 - 8, 2018

Mobile Graphics 3DV 2018 tutorial

Marco Agus, KAUST

Enrico Gobbetti, CRS4

Fabio Marton, CRS4

Giovanni Pintore, CRS4

Pere-Pau Vázquez, UPC

September 2018



WELCOME TO THIS HALF-DAY TUTORIAL!

Subject: Mobile Graphics

- **All you need to know to get an introduction to the field of mobile graphics:**
 - Scope and definition of “mobile graphics”
 - Brief overview of current trends in terms of available hardware architectures and research apps built on top of them
 - Quick overview of development environments
 - Rendering, with focus on rendering massive/complex surface and volume models
 - Capture, with focus on data fusion techniques

Speakers (in alphabetical order)

- **Marco Agus (1,2)**
 - Research Engineer at KAUST (Saudi Arabia)
 - Researcher at CRS4 (Italy)
- **Enrico Gobbetti (1) - Organizer**
 - Director of Visual Computing at CRS4 (Italy)
- **Fabio Marton (1)**
 - Researcher at CRS4
- **Giovanni Pintore (1)**
 - Researcher at CRS4
- **Pere-Pau Vázquez (3)**
 - Professor at UPC, Spain

(1) www.crs4.it/vic/

(2) <https://vcc.kaust.edu.sa>

(3) <http://www.virvig.eu/>



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Funding



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Schedule

5'	0. Introduction and outline	Marco
10'	1. Evolution of Mobile Graphics	Marco
30'	2.1 Mobile Graphics Trends / Hardware - Applications	Marco
10'	3. Graphics Development for Mobile Systems	Marco
5'	4.1 Scalable Mobile Visualization / Introduction	Fabio
30'	4.2 Scalable Mobile Visualization / Massive Meshes	Fabio
30'	BREAK	-
5'	4.3 Scalable Mobile Visualization / Intro to complex lighting	Fabio
10'	4.4 Scalable Mobile Visualization / Lighting Precomputation	Fabio
10'	4.5 Scalable Mobile Visualization / Smart Shading	Fabio
15'	4.6 Scalable Mobile Visualization / Volumes	Fabio
10'	5.1 Mobile Metric Capture and Reconstruction / Introduction	Gianni
30'	5.2 Mobile Metric Capture and Reconstruction / Case studies	Gianni
10'	6. Closing and Q&A	ALL

Next Session

EVOLUTION OF MOBILE GRAPHICS