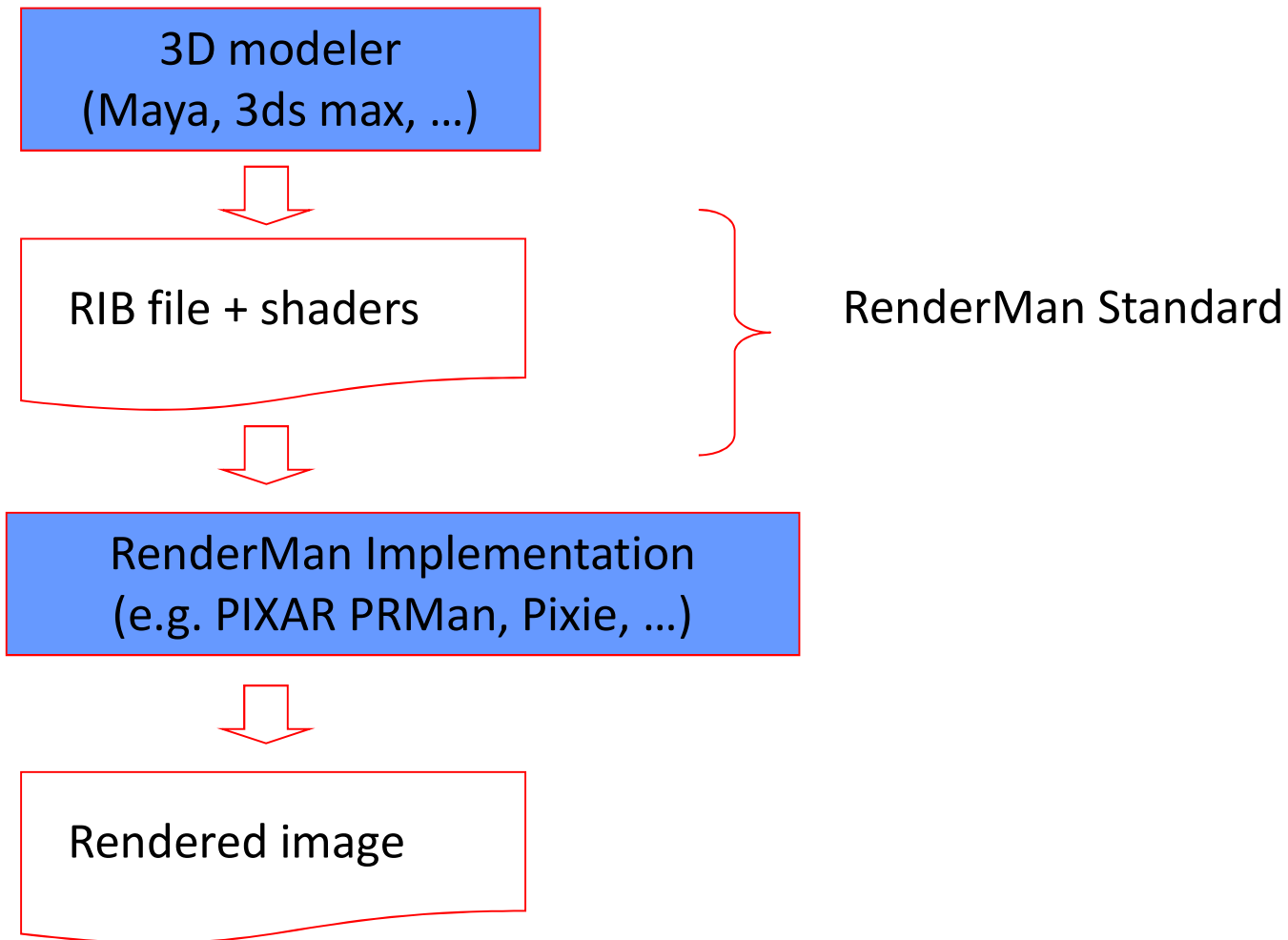

B4M39RSO

RenderMan a další

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CTU Prague, 2018

What is RenderMan

- Standard created and published by PIXAR in 1988



RenderMan BASICS

- RIB stands for RenderMan Interface Bytestream
- RenderMan defines different kinds of primitives including higher order surfaces
- RenderMan resembles extended C language and is in ASCII (no object oriented programming concept).
- RenderMan interface is general and well describe, for example:
http://local.wasp.uwa.edu.au/~pbourke/dataformats/rib/RISpec3_2.pdf,
<https://renderman.pixar.com/products/rispec/index.htm>
- RendeMan language consists of shaders definition:
 - Light sources shaders
 - Displacement shaders
 - Surface shaders
 - Volume shaders
 - Image shadersand the world geometry description.

RenderMan survival Kit (1)

- While doing all this, think of our first five lectures – they are all in there!
 - You'll find various info about RenderMan at <http://www.renderman.org/RMR/Books/index.html>
1. Get acquainted to RenderMan by reading:
 - Larry Gritz: RenderMan for Poets, version 2.0, February 1994
<http://www.cs.utexas.edu/users/amenta/eog/poets.pdf>
 - Saty Raghavachary: A Brief Introduction to RenderMan
<http://www.renderman.org/RMR/Books/index.html>
 - RenderMan Academy – "Freshmen" Section
<http://www.rendermanacademy.com/docs/ClassFrame01.php?sel=1>

RenderMan survival Kit (2)

2. Install PIXIE, play around with it
<http://www.renderpixie.com/>,
<http://sourceforge.net/projects/pixie>
3. Read & try out PIXIE's tutorials
 - ❑ especially the “Global Illumination” section
 - ❑ make sure you understand Photon maps, Irradiance Caching and Ambient Occlusion
 - ❑ http://www.george-graphics.co.uk/pixiewiki/Main_Page
4. Study SIGGRAPH 2003 Course:
RenderMan, Theory and Practice.
 - ❑ Chapter 2: Programmable Ray Tracing
 - ❑ Chapter 3: Global Illumination and All That
 - ❑ <http://www.seanet.com/~myandper/abstract/sig03c09.htm>

Other Renderman links

- <https://renderman.pixar.com/>
- <http://www.renderman.org/>
- <http://www.renderpixie.com/> (version 2017, 64-bit)
- Different documentation and examples on the web....