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**X39RSO/A4M39RSO**

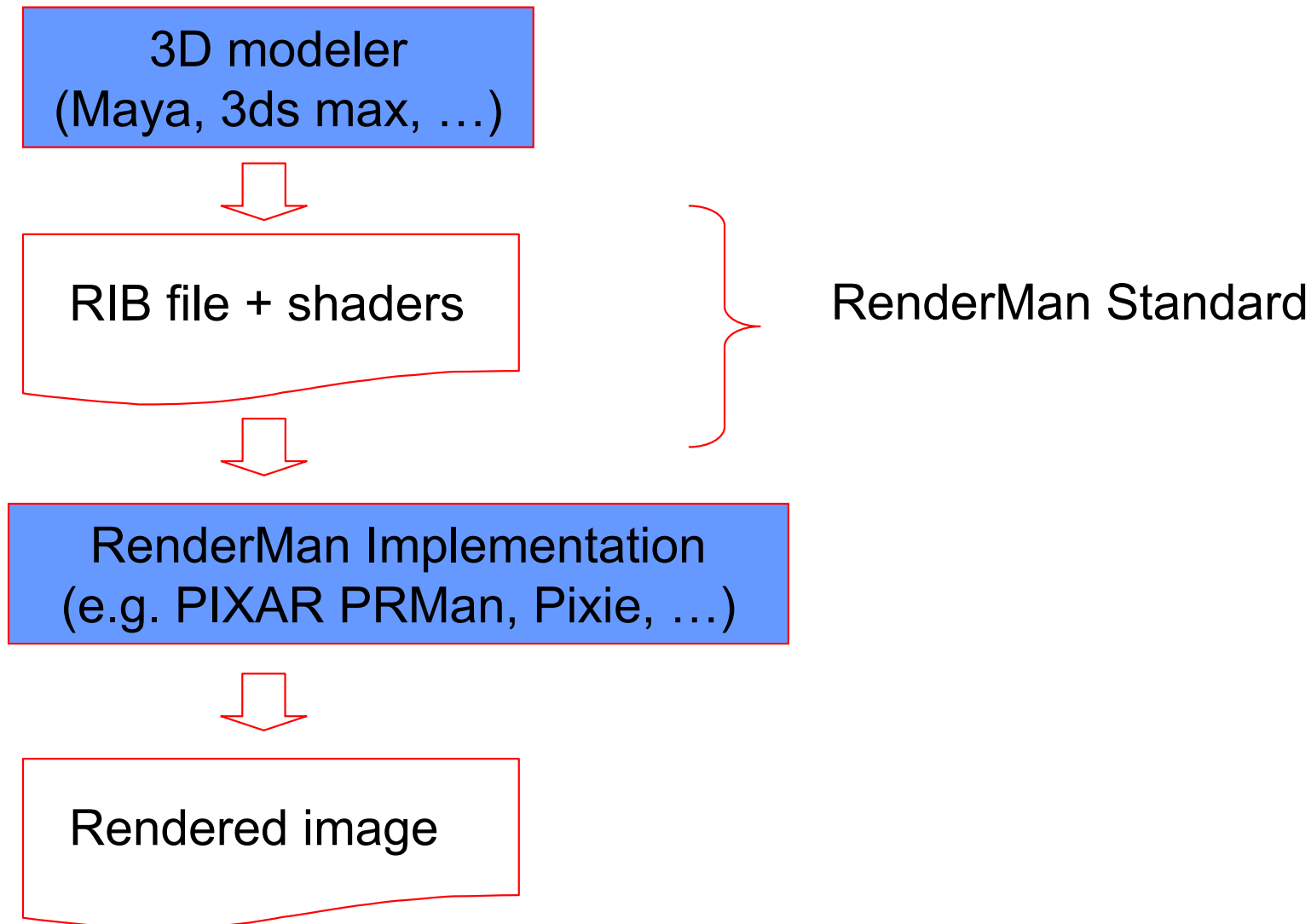
**RenderMan**

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# 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](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/>
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](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 2009, 64-bit)
- Different documentation and examples on the web....