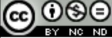






A Brief History of Shaders

Oregon State University
 Mike Bailey
 mjb@cs.oregonstate.edu

Oregon State University Computer Graphics
 HistoryOfShaders.pptx
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History of Shaders, I

1977: Star Wars IV: A New Hope





Image Processing


Digital Editing and Compositing

Effects

Image/Volume Rendering Hardware



1979: Ed Catmull, Alvy Ray Smith, and others leave NYIT to form the Computer Division of Lucasfilm




1984: John Lassiter leaves Disney Animation to join Pixar

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History of Shaders, II


Image/Volume Rendering Hardware

Rendering Software



Pixar Image Computer

REYES




RenderMan

RIB

Shade Trees

prman

Pixar Animation Studios



1984 (1984)
 Star Trek II (1982)
 Young Sherlock Holmes (1985)

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History of Shaders, III

Pixar Animation Studios

1986: Steve Jobs buys Pixar for \$10M

Steve Jobs adds another \$60M to keep Pixar running

1986: Luxo Jr. - Nominated for an Academy Award

1988: Tin Toy - won Academy Award for Best Animated Short




1993: RenderMan wins a Technical Academy Award

1995: Toy Story

1995: Pixar IPO - Steve Jobs's stake is now worth \$1.2B

2004: Pixar bought by Disney for \$7B, making Steve Jobs's stake worth \$3.5B

Steve Jobs's estate is now Disney's largest shareholder (7%) - way ahead of even Roy Disney's estate (1%)

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History of Shaders, IV

5

2004: OpenGL 2.0 / GLSL 1.10 includes Vertex and Fragment Shaders

2008: OpenGL 3.0 / GLSL 1.30 adds features left out before

2010: OpenGL 3.3 / GLSL 3.30 adds Geometry Shaders

2010: OpenGL 4.0 / GLSL 4.00 adds Tessellation Shaders

2012: OpenGL 4.3 / GLSL 4.30 adds Compute Shaders

2017: OpenGL 4.6 / GLSL 4.60



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There is lots more detail at:

https://www.khronos.org/opengl/wiki/History_of_OpenGL

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History of Shaders, V

6

2014: Khronos starts Vulkan effort using
GLSL and SPIR-V

2016: Vulkan 1.0

2016: Vulkan 1.1

2020: Vulkan 1.2

2022: Vulkan 1.3

2023: Vulkan 1.3 with new extensions



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There is lots more detail at:

[https://en.wikipedia.org/wiki/Vulkan_\(API\)](https://en.wikipedia.org/wiki/Vulkan_(API))



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