



# OpenGL Compatible Interface

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# Apresentação

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- A Implementação
  - Recursos Utilizados
  - Pipeline de renderização do OpenGL
- Exemplos
- Trabalhos Futuros
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# Introdução

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# Objetivo

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Implementar uma interface OpenGL fazendo uso apenas da biblioteca S3D utilizada no curso.



# O que é o OpenGL ?

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- Conjunto de comandos que permitem a especificação de objetos geométricos em 2 ou 3 dimensões, além de comandos que controlam como esse objetos são renderizados no framebuffer.
- Máquina de estado que controla um conjunto de operações de desenho específicas.



# Implementação

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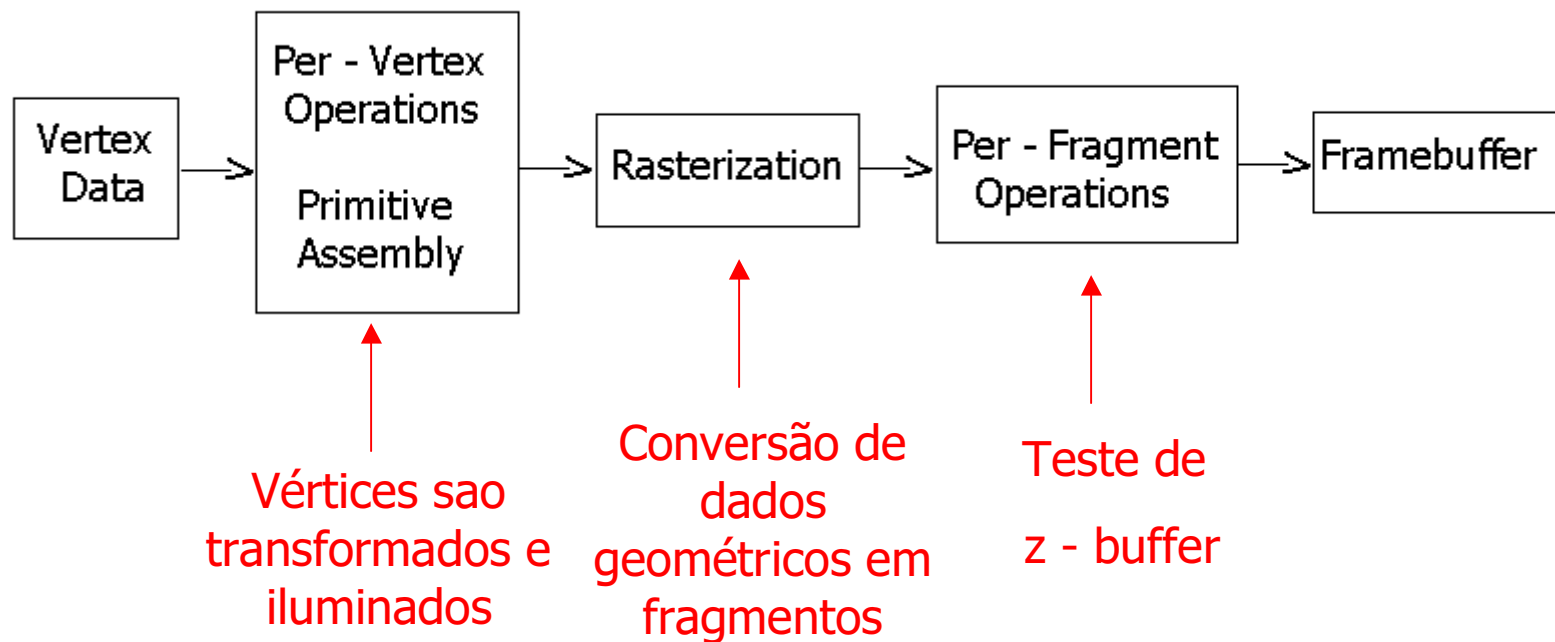


# Recursos Utilizados

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- Biblioteca S3D
- OpenGL Utility Library (GLU)
- OpenGL Utility Toolkit (GLUT)

# Pipeline de Renderização do OpenGL

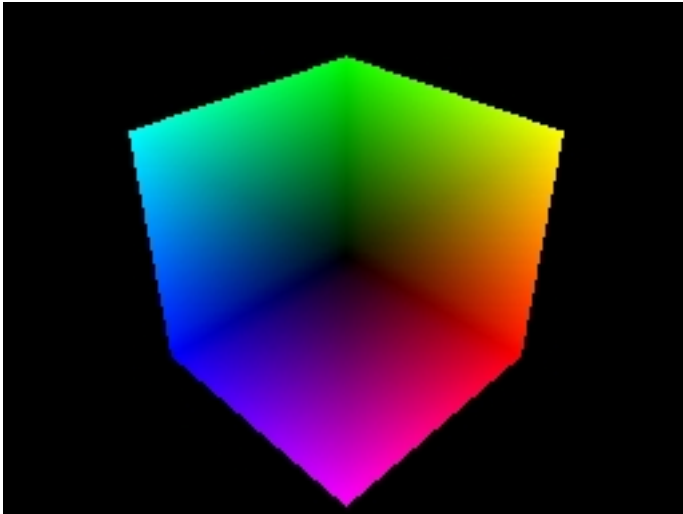
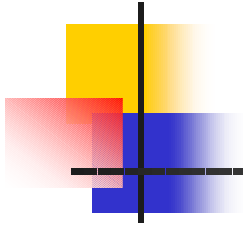


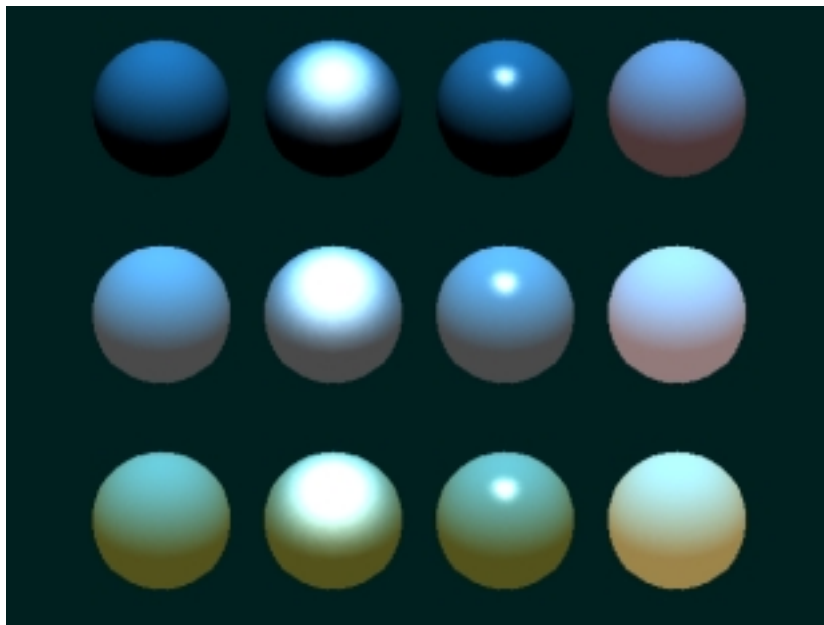
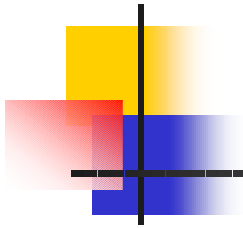




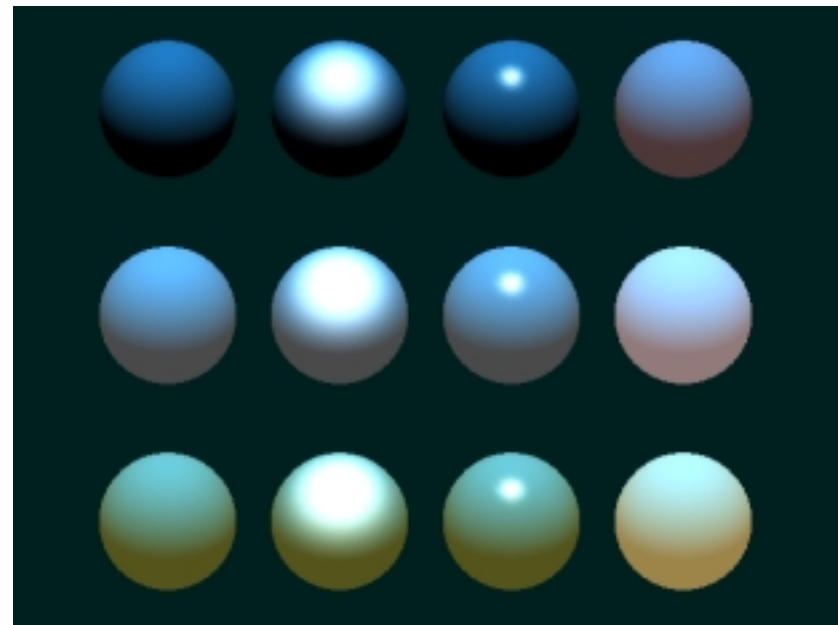
# Exemplos

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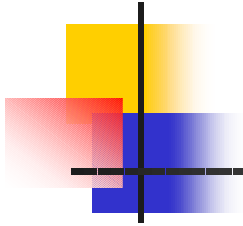




S3D



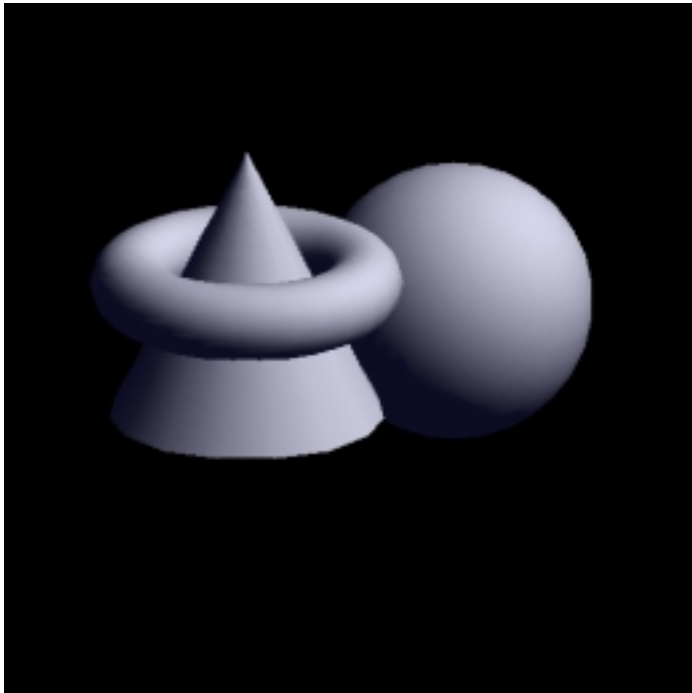
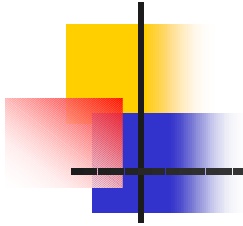
OpenGL



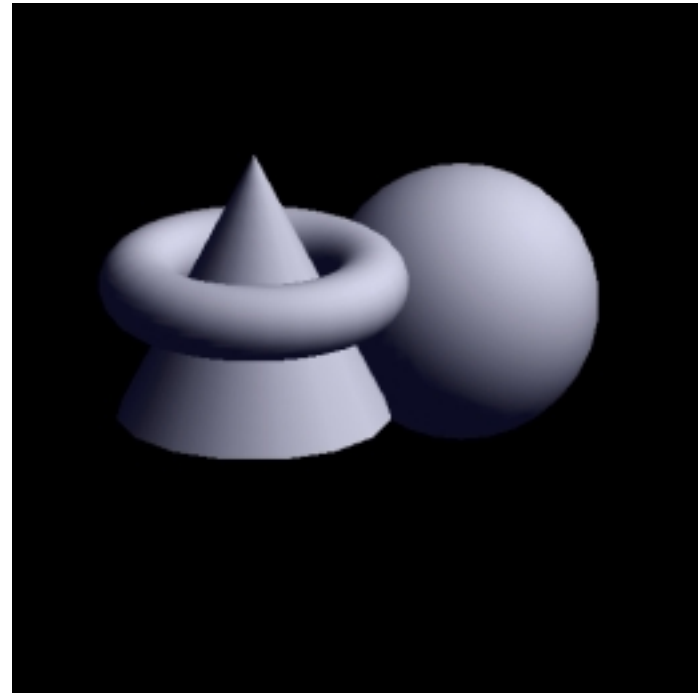
S3D



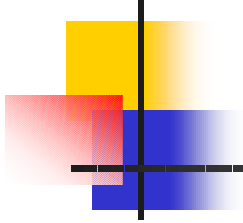
OpenGL



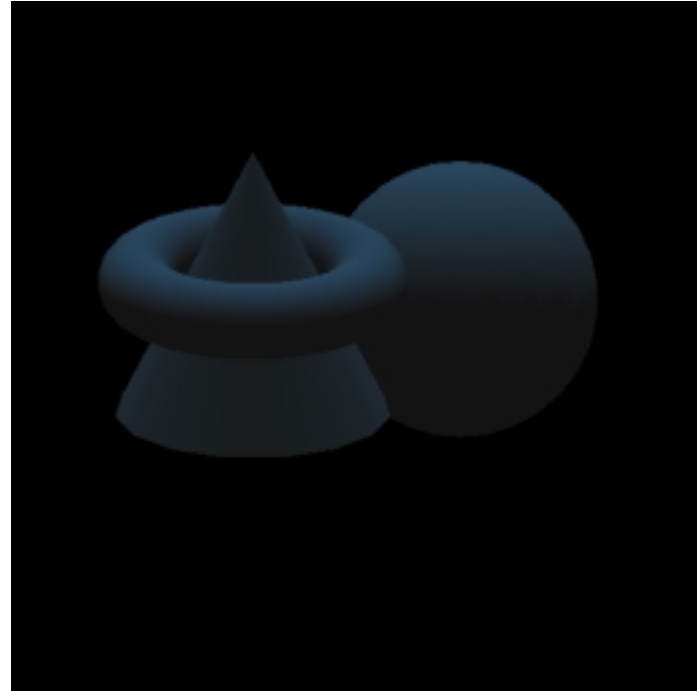
S3D



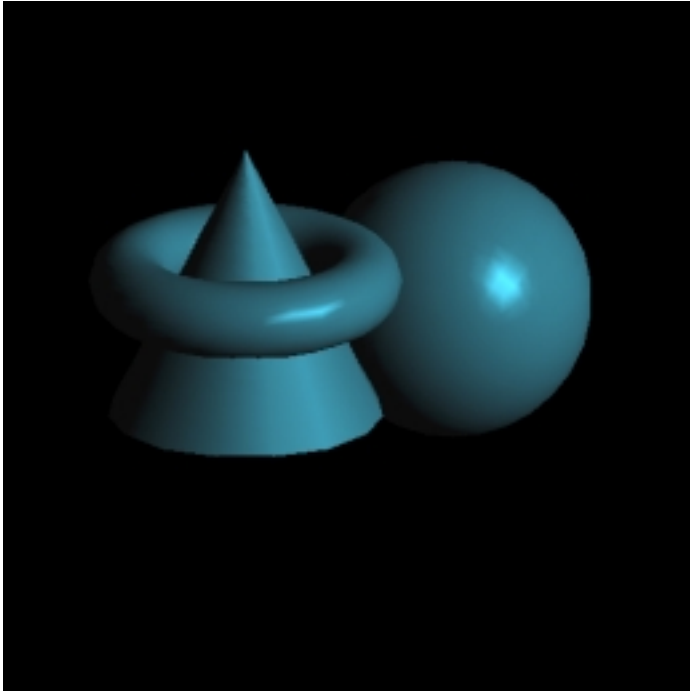
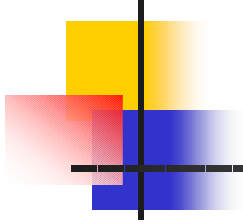
OpenGL



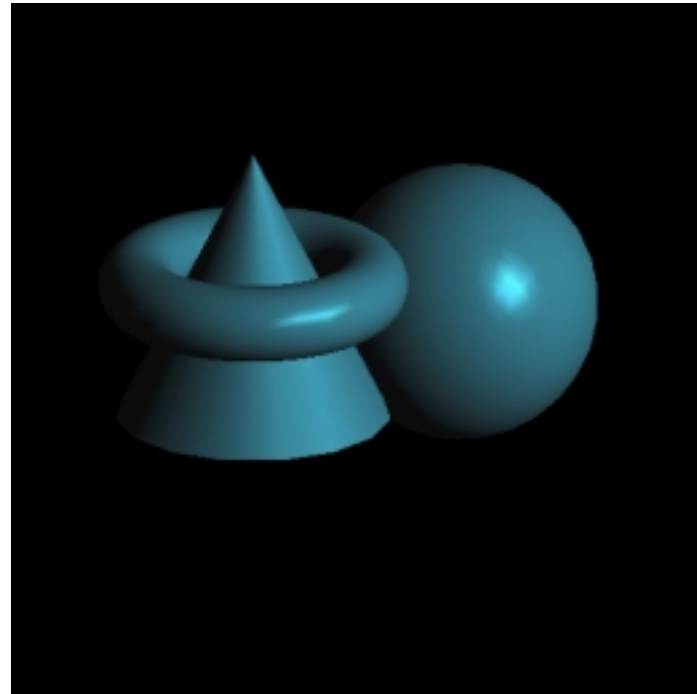
S3D



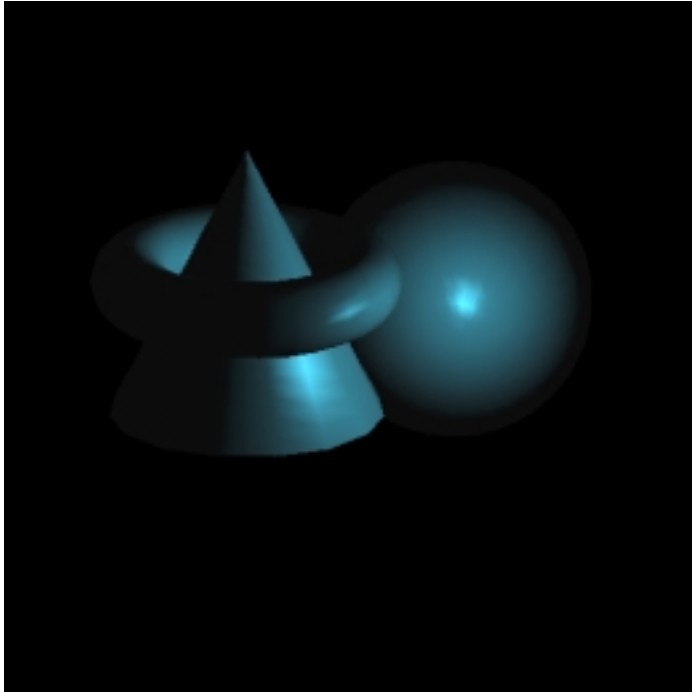
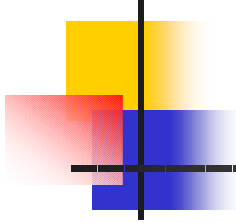
OpenGL



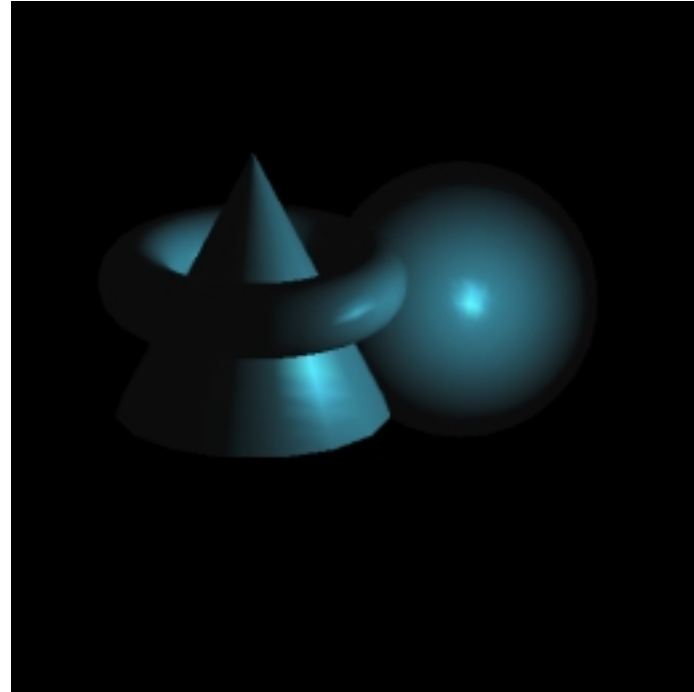
S3D



OpenGL

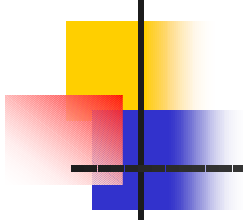


S3D



OpenGL





[movelight](#)



# Trabalhos Futuros

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- Clipping
- Renderização de linhas
- Textura



# Referências

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- Brian Kernigan, Dennis Ritchie – ***C: A Linguagem de Programação***, Editora Campus, 1986.
- Mark Segal, Kurt Akeley – ***The OpenGL Graphics System: A Specification (Version 1.2.1)***, Silicon Graphics, 1999
- Mason Woo, Jackie Neider, Tom Davis, Dave Shreiner – ***OpenGL Programming Guide***, Version 1.2, 3rd edition, 1997.