

# Jan 24

## . Dot product (scalar)

- Gives the length/magnitude

## . Cross product (vector)

- Normal
- Bitangent

## . Quaternions

- Gimbal lock
  - When two axes represents the same axis and you lose one degree of freedom

## . Euler Angles

## . Homogeneous Coordinates

## . Rotation Matrices

.Graphics Pipeline

.Implement Ray Casting

.Implement Graph Traversal

.Deferred Rendering vs Forward Rendering

- Forward Rendering depends on the lights

# HW:

- Get Unity Ready
- Why Quaternions doesn't have Gimbal lock and Euler does?
- Timecode and frame syncing

---

Revision #1

Created 30 January 2024 05:01:12 by victor

Updated 30 January 2024 05:01:24 by victor