Intro to graphics applications and Review

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Textbook Chapter 15

Some slides courtesy of M. Kim, KAIST

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Today

- Presentation on graphics applications and research (by Shailen Agarwal)
  - Current research, animation, Unreal engine
  - Review of transformations and projection
Recap

* All numbers must be in the same frame

* Most important frames

Clip → World → Model

\[
\begin{bmatrix}
\cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot
\end{bmatrix}
\]

\[
\text{modelViewMatrix}
\]

\[
\text{projectionMatrix}
\]

\[
\text{viewMatrix}
\]

\[
\text{modelMatrix}
\]

Normals transform by \( A^{-T} \) “inverse transpose”

\[
(\text{modelViewMatrix})^{-T} = \text{normalMatrix}
\]

(provided by Three.js)

See L18 notes!

Next class review L15