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GPU Matrix Utilities (gpu.matrix)

This module provides access to the matrix stack.

gpu.matrix.**get_model_view_matrix()**

Return a copy of the model-view matrix.

RETURNS:

A 4x4 view matrix.

RETURN TYPE:

mathutils.Matrix

gpu.matrix.**get_normal_matrix()**

Return a copy of the normal matrix.

RETURNS:

A 3x3 normal matrix.

RETURN TYPE:

mathutils.Matrix

gpu.matrix.**get_projection_matrix()**

Return a copy of the projection matrix.

RETURNS:

A 4x4 projection matrix.

RETURN TYPE:

mathutils.Matrix

gpu.matrix.**load_identity()**

Load an identity matrix into the stack.

gpu.matrix.**load_matrix(matrix)**

Load a matrix into the stack.

PARAMETERS:

matrix (mathutils.Matrix) – A 4x4 matrix.

gpu.matrix.**load_projection_matrix(matrix)**

Load a projection matrix into the stack.

PARAMETERS:

matrix (mathutils.Matrix) – A 4x4 matrix.

gpu.matrix.**multiply_matrix(matrix)**

Multiply the current stack matrix.

PARAMETERS:

matrix (mathutils.Matrix) – A 4x4 matrix.

gpu.matrix.**pop()**

Remove the last model-view matrix from the stack.

gpu.matrix.**pop_projection()**

Remove the last projection matrix from the stack.

gpu.matrix.**push()**

Add to the model-view matrix stack.

gpu.matrix.**push_pop()**

Context manager to ensure balanced push/pop calls, even in the case of an error.

gpu.matrix.**push_pop_projection()**

Context manager to ensure balanced push/pop calls, even in the case of an error.

gpu.matrix.**push_projection()**

Add to the projection matrix stack.

gpu.matrix.**reset()**

Empty stack and set to identity.

gpu.matrix.**scale(scale)**

Scale the current stack matrix.

PARAMETERS:

scale (*Sequence[float]*) – Scale the current stack matrix with 2 or 3 floats.

gpu.matrix.**scale_uniform(scale)**

PARAMETERS:

scale (*float*) – Scale the current stack matrix.

gpu.matrix.**translate(offset)**

Scale the current stack matrix.

PARAMETERS:

offset (*Sequence[float]*) – Translate the current stack matrix with 2 or 3 floats.