SplineIKConstraint(Constraint)

base classes — bpy_struct, Constraint

class bpy.types.**SplineIKConstraint(Constraint)**

Align ‘n’ bones along a curve

bulge

Factor between volume variation and stretching

TYPE:

float in [0, 100], default 0.0

bulge_max

Maximum volume stretching factor

TYPE:

float in [1, 100], default 0.0

bulge_min

Minimum volume stretching factor

TYPE:

float in [0, 1], default 0.0

bulge_smooth

Strength of volume stretching clamping

TYPE:

float in [0, 1], default 0.0

chain_count

How many bones are included in the chain

TYPE:

int in [1, 255], default 0

joint_bindings

(EXPERIENCED USERS ONLY) The relative positions of the joints along the chain, as percentages

TYPE:

float array of 32 items in [0, 1], default (0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0)

target

Curve that controls this relationship

TYPE:

Object

use_bulge_max

Use upper limit for volume variation

TYPE:

boolean, default False

use_bulge_min

Use lower limit for volume variation

TYPE:

boolean, default False

use_chain_offset

Offset the entire chain relative to the root joint

TYPE:

boolean, default False

use_curve_radius

Average radius of the endpoints is used to tweak the X and Z Scaling of the bones, on top of XZ Scale mode

TYPE:

boolean, default False

use_even_divisions

Ignore the relative lengths of the bones when fitting to the curve

TYPE:

boolean, default False

use_original_scale

Apply volume preservation over the original scaling

TYPE:

boolean, default False

xz_scale_mode

Method used for determining the scaling of the X and Z axes of the bones

- `NONE` None – Don't scale the X and Z axes.
- `BONE_ORIGINAL` Bone Original – Use the original scaling of the bones.
- `INVERSE_PRESERVE` Inverse Scale – Scale of the X and Z axes is the inverse of the Y-Scale.
- `VOLUME_PRESERVE` Volume Preservation – Scale of the X and Z axes are adjusted to preserve the volume of the bones.

TYPE:

enum in ['NONE', 'BONE_ORIGINAL', 'INVERSE_PRESERVE', 'VOLUME_PRESERVE'], default 'NONE'

y_scale_mode

Method used for determining the scaling of the Y axis of the bones, on top of the shape and scaling of the curve itself

- `NONE` None – Don't scale in the Y axis.
- `FIT_CURVE` Fit Curve – Scale the bones to fit the entire length of the curve.
- `BONE_ORIGINAL` Bone Original – Use the original Y scale of the bone.

TYPE:

enum in ['NONE', 'FIT_CURVE', 'BONE_ORIGINAL'], default 'NONE'

classmethod bl_rna_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found.

RETURN TYPE:

RETURN TYPE:

bpy.types.Struct subclass

classmethod bl_rna_get_subclass_py(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- bpy_struct.id_data
- Constraint.name
- Constraint.type
- Constraint.is_override_data
- Constraint.owner_space
- Constraint.target_space
- Constraint.space_object
- Constraint.space_subtarget
- Constraint.mute
- Constraint.enabled
- Constraint.show_expanded
- Constraint.is_valid
- Constraint.active
- Constraint.influence
- Constraint.error_location
- Constraint.error_rotation

Inherited Functions

- bpy_struct.as_pointer
- bpy_struct.driver_add
- bpy_struct.driver_remove
- bpy_struct.get
- bpy_struct.id_properties_clear
- bpy_struct.id_properties_ensure
- bpy_struct.id_properties_ui
- bpy_struct.is_property_hidden
- bpy_struct.is_property_overridable_library
- bpy_struct.is_property_readonly
- bpy_struct.is_property_set
- bpy_struct.items
- bpy_struct.keyframe_delete
- bpy_struct.keyframe_insert
- bpy_struct.keys
- bpy_struct.path_from_id
- bpy_struct.path_resolve
- bpy_struct.pop
- bpy_struct.property_overridable_library_set
- bpy_struct.property_unset
- bpy_struct.type_recast
- bpy_struct.values
- Constraint.bl_rna_get_subclass
- Constraint.bl_rna_get_subclass_py