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Interpolate Hair Curves

Interpolates existing guide curves on a surface mesh. The [Duplicate Hair Curves](#) is a similar option with simpler behavior that may offer better performance.

Note

This node/modifier will not function without the *Surface* geometry/object and *Surface UV Map* inputs.

Inputs

Geometry

Input Geometry (only curves will be affected).

Surface

Surface geometry for generation. This input takes priority over the corresponding object input if both are provided.

Surface

Surface object for generation (Needs matching transforms).

Surface UV Map

Surface UV map stored on the mesh used for finding curve attachment locations.

Surface Rest Position

Set the surface mesh into its rest position before attachment.

Tip

In a typical hair generation setup, this node or modifier will be combined with the [Deform Curves on Surface Node](#). If that operation comes after this one, it makes sense to turn this option on so the position used is the pre-deformed position consistent with the expectations for the deformation's input.

Follow Surface Normal

Align the interpolated curves to the surface normal.

Part by Mesh Islands

Use mesh islands of the surface geometry for parting.

Interpolation Guides

Amount of guides to be used for interpolation per curve.

Distance to Guides

Distance around each guide to spawn interpolated curves.

Poisson Disk Distribution

Use poisson disk distribution method to keep a minimum distance.

Density

Surface density of generated hair curves.

Density Mask

Factor applied on the density for curve distribution.

Mask Texture

Discard points based on an mask texture after distribution. The image is sampled with the *Surface UV Map* input.

Tip

The accuracy of sampling the image doesn't depend on the density of the surface mesh's vertices because it is sampled after the curve root point are generated, the accuracy . However, using the *Density Mask* input instead can give better performance. Using them in combination can give the benefits of both methods.

Viewport Amount

Factor applied on the density for the viewport.

Seed

Random seed for the operation.

Properties

This node has no properties.

Outputs

Geometry

Guide Index

Index of the main guide curve per curve.

Surface Normal

Normal direction of the surface mesh at the attachment point.