# PxrManifold2D

This nodes allows artists to place patterns using a 2D solution that typically relies on UVs provided by the artist. You may transform the resulting placement (translate, rotate, etc) or repeat the pattern using the controls below. For objects without UVs or requiring a projection in 3D space, use the PxrM anifold3D instead.

# **Input Parameters**

#### Center

Transformations are centered here

# Angle

Rotation angle around origin.

## **Frequency S**

Frequency/repetition of a feature in the S direction.

## **Frequency T**

Frequency/repetition of a feature in the T direction.

# Offset S

Move from the origin in the S direction.

# Offset T

Move from the origin in the T direction.

#### Invert S

Flip the manifold in the S direction.

# Invert T

Flip the manifold in the T direction.

## Warp

Connect a noise or texture to warp the domain

## Warp Amount

Slider control for Warp amount

# Advanced

#### calcRadius

Calculate radius the hard way from derivatives to get around renderer bug in the radius calculation

#### enableJacobianfilter

Enables calculating a filter radiusbased on the Jacobian in screen space. This should create a filter that is less dependent on the parameterization of the geometry

## JacobianRadiusMult

Multiplies the radius calculated based on the Jacobian in screen space

## uvSet

A specific surface UV set. Also, helpful for adding texture primvars to hair.

# **Output Parameters**

#### result

The 2D manifold.

#### resultS

A float representation of the S component of the manifold.

#### resultT

A float representation of the T component of the manifold.