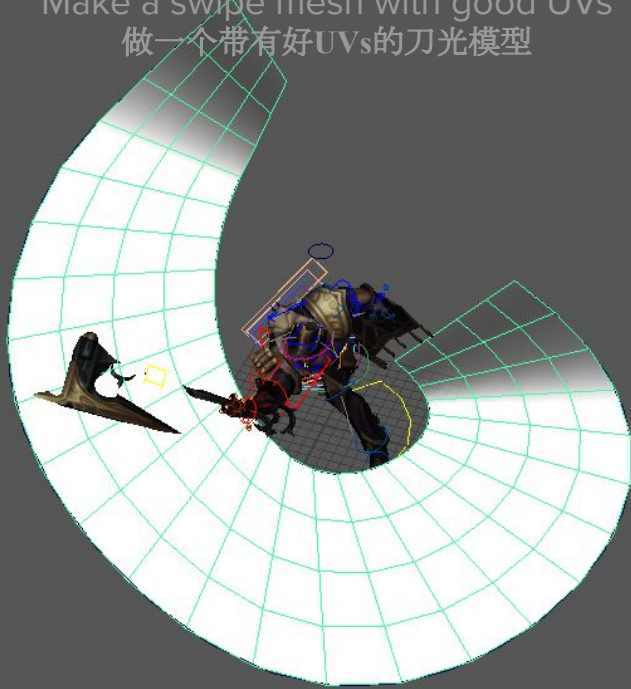# Maya Attack Swipes

Maya攻击刀光

By Oli McDonald

Goal目标
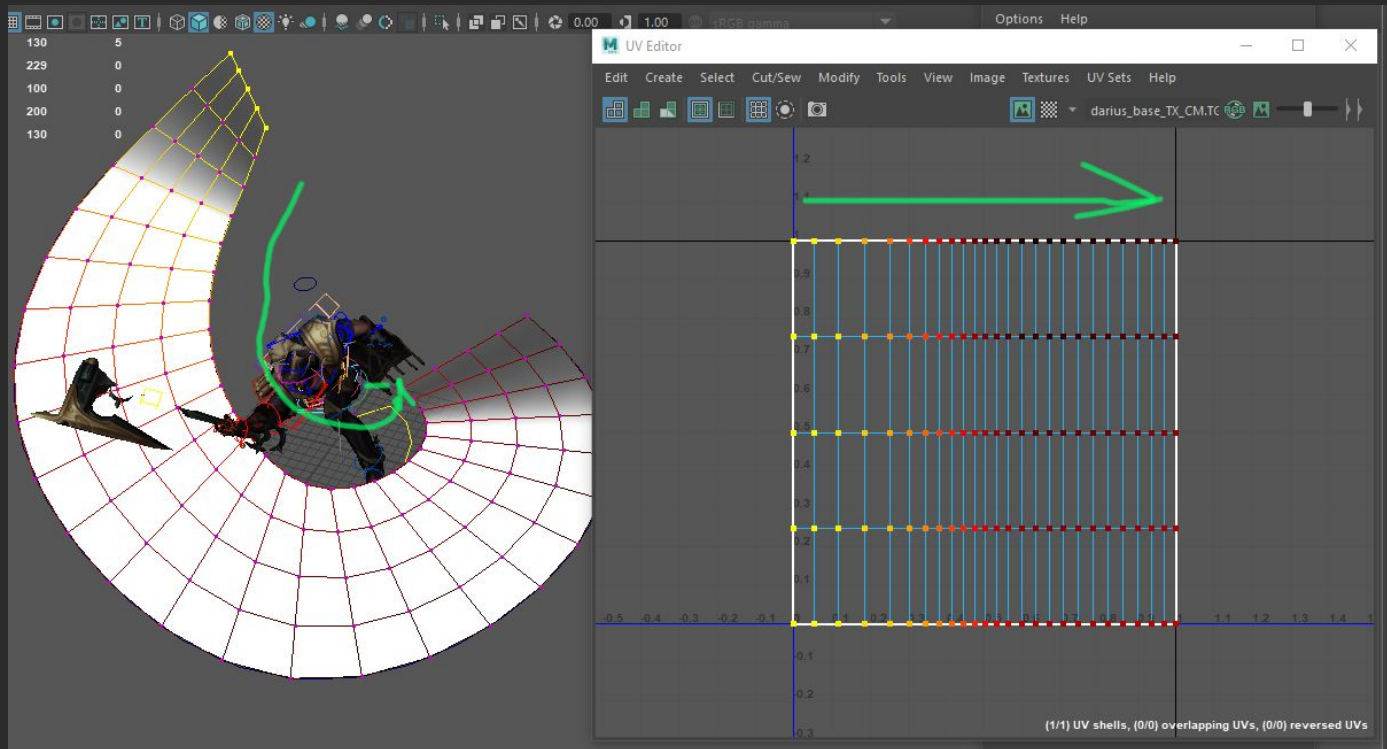
Make a swipe mesh with good UVs
做一个带有好UVs的刀光模型

- Swipes add a lot of satisfaction to Auto Attacks

  刀光会对自动攻击增加很多满足感

- They can also be used for spell casts

  他们也可以用在施法上

- We want a well optimised mesh with straight UVs and painted vertex colours
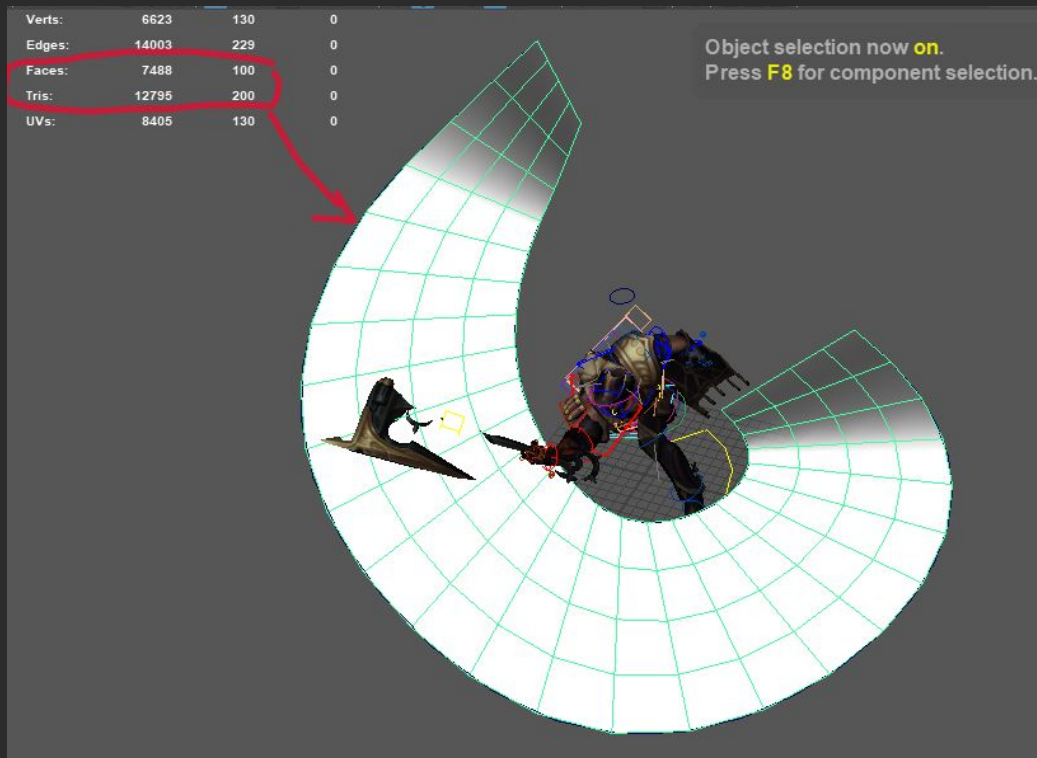
  我们想要一个良好优化的模型同时带有拉直的**UVs**和点上色

- We want a mesh with UVs mapped along its length

我们想要模型的UVs要沿著长度展开

- We want a well optimised mesh

  我们要有一个良好优化的模型

- We want to have vertex painted alpha to fade off the edges

  我们要有点上色透空来淡出边缘

- There are many ways we could achieve this in Maya, but the best method allows us to work **Non-Destructively**, in a way that will allow us to update our shape easily if we don't like how it looks in game

  在**Maya**里我们有很多种方式来达到这个效果，但是最好的方法可以让我们的工作<u>不带有破坏性</u>，意思是可以让我们简易的更新我们的形状，如果我们不喜欢他游戏里看起来的样子的话。

- Step 1: 第一步

  Draw an EP Curve

  画一个EP弧线
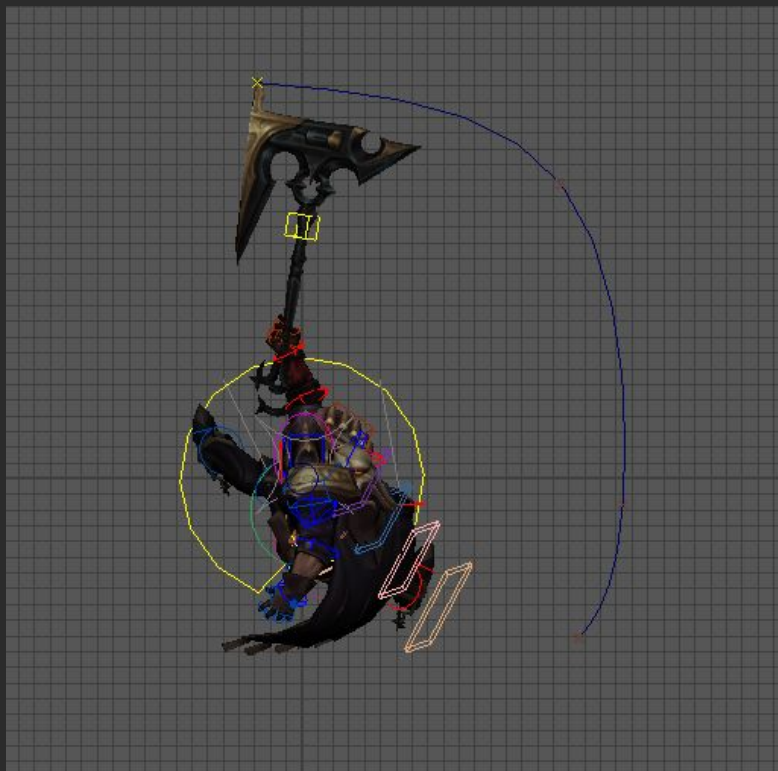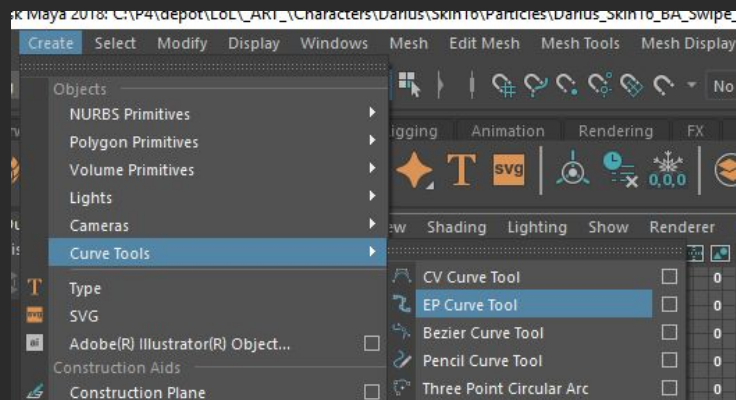
- Go through your timeline, and click to draw a curve along the path of the weapon. Try to make this curve follow the furthest edge of the weapon
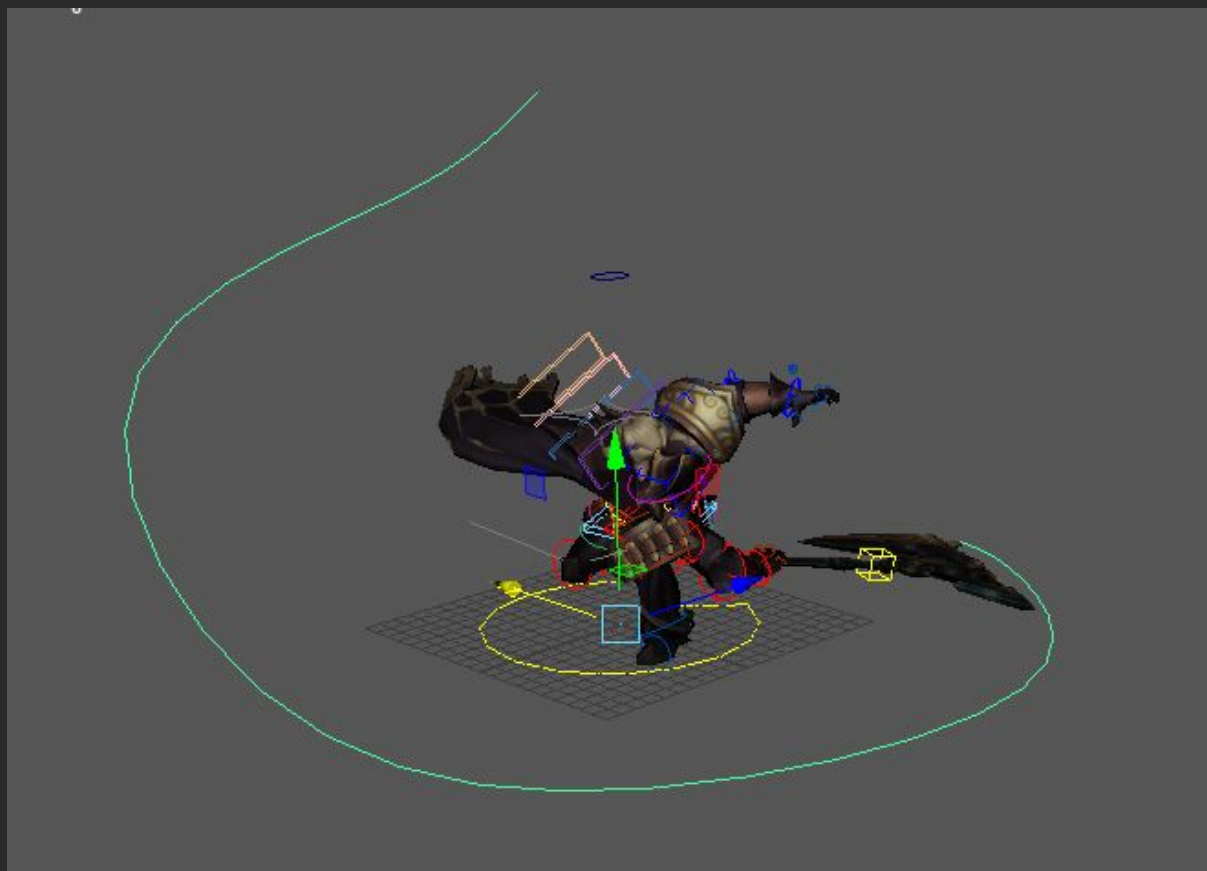
  浏览你的时间轴，然后点击沿着武器的路径画一条曲线。试着让这条曲线沿着武器最远的边缘

  TOP TIP: 提示

  Hold V as you click, and your control points will snap to the vertices of the weapon. This will very quickly give you the right shape, and means you can use the top camera if you wish

 在你按的时候按著V，然后你的控制点就会吸附到武器的点上。这可以很快速的给你正确的形状，并且表示如果你要的话，可以使用上方相机。
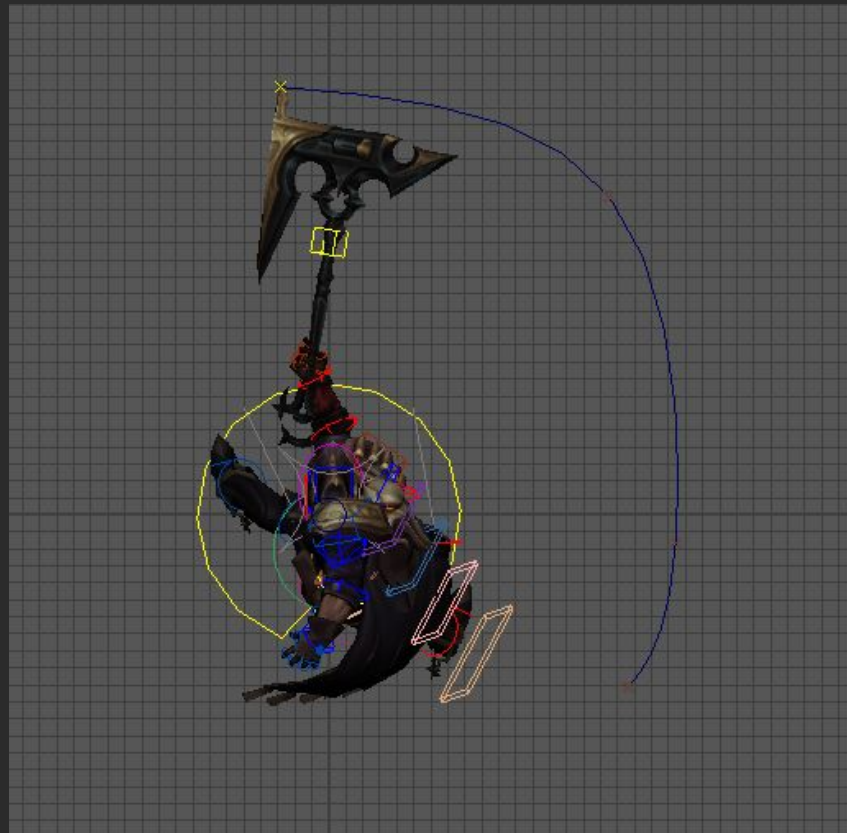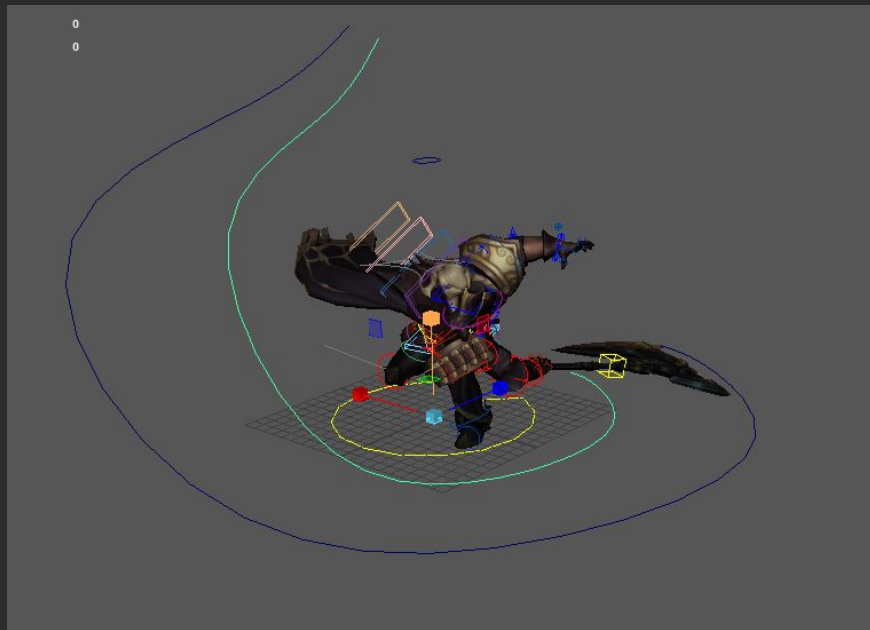
- RESULT:

  结果:

- Step 2: 第二步

- Duplicate the curve, and shrink it so that it matches the inside of the weapon.

  复制弧线，并且缩小让他可以匹配武器内部。

- Press Ctrl-D with the curve selected to duplicate

  选取弧线按**Ctrl-D**来复制

- Press R to swap to scale tool

  按**R**换成缩放工具

- Hold Ctrl and click on the Y scaling handle. This will scale the curve in only the XZ axes.

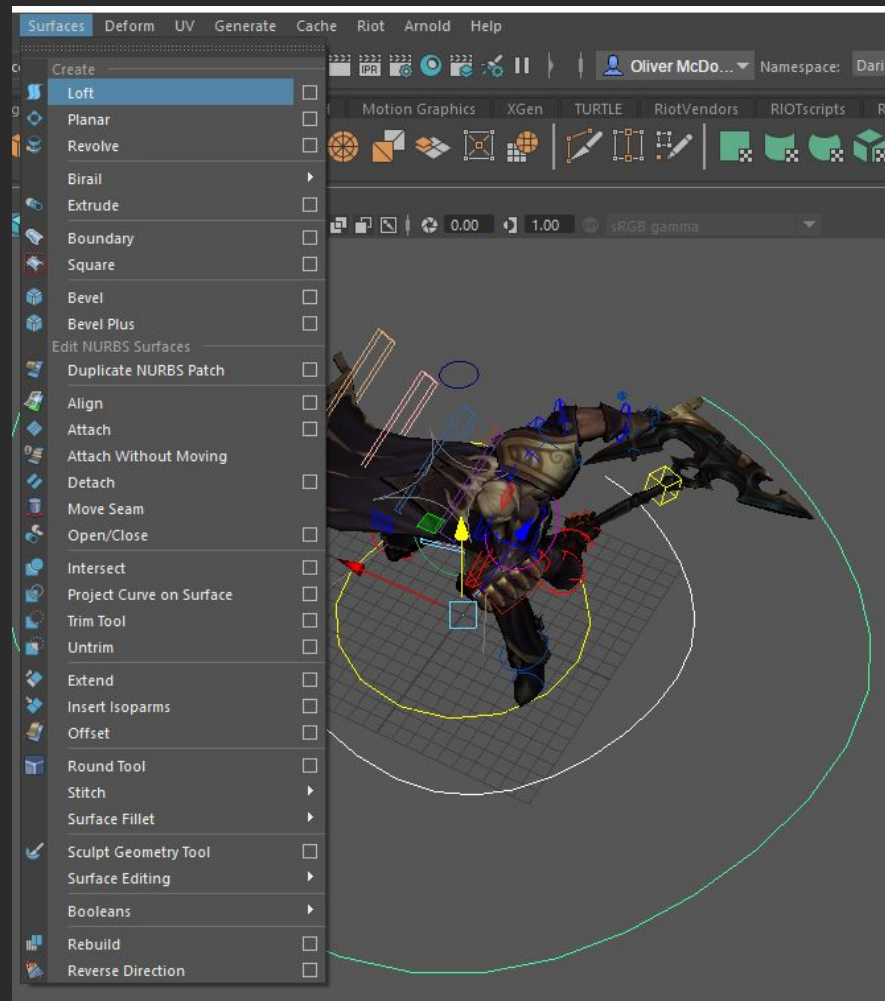 按著**Ctrl**并且点击**Y**缩放把手。这样弧线只会在**XZ**轴缩放
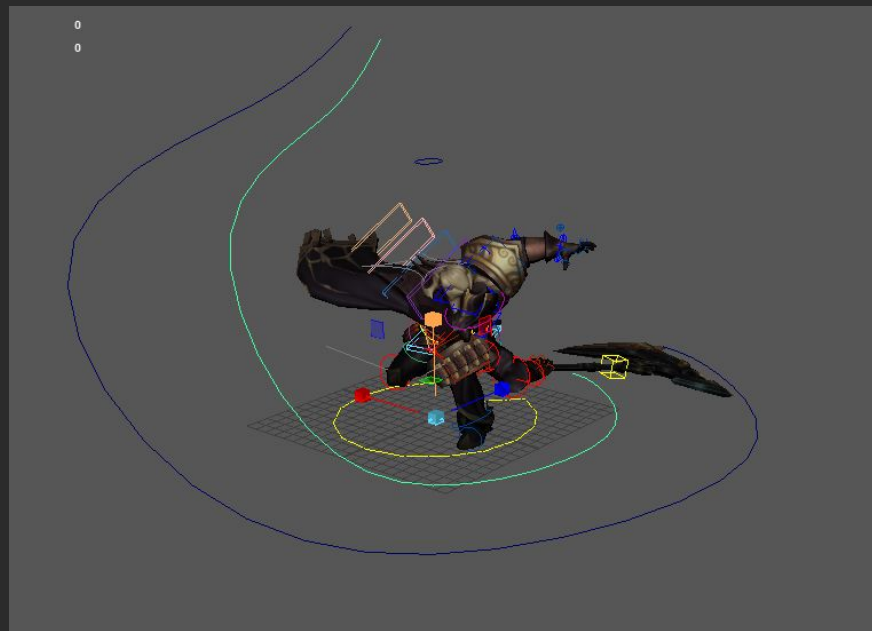
- The reason that we duplicate the curve instead of drawing a new one is so that they have the same number of control points. This will be important later.

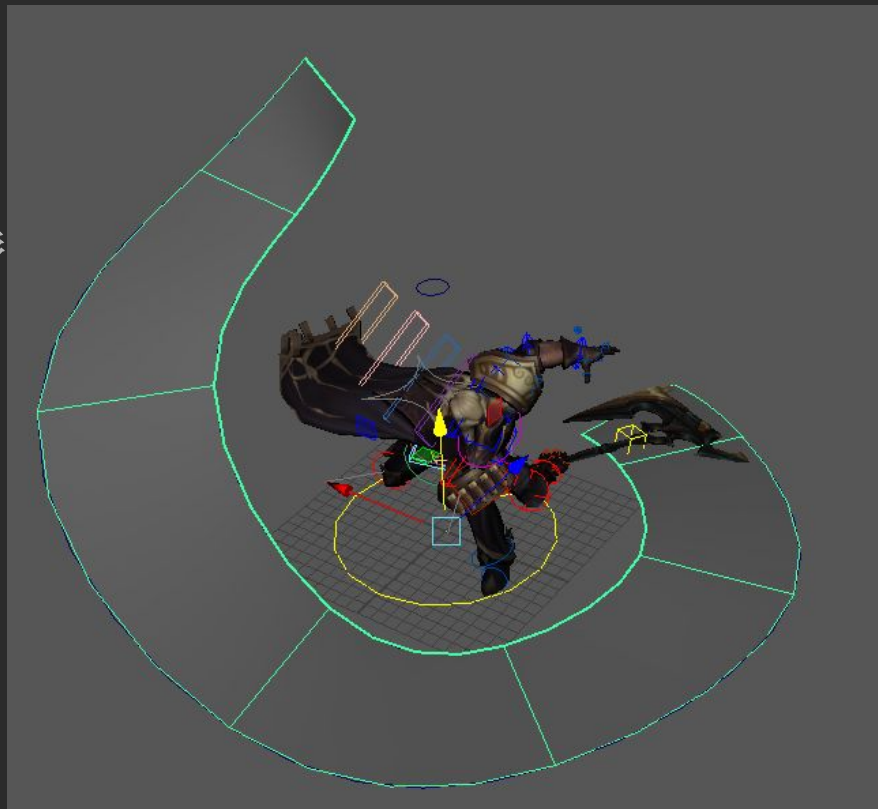我们复制弧线而不重新画一条的原因是，这样他们才有一样数量的控制点。这对接下来的步骤很重要。

- Step 3: 第三步

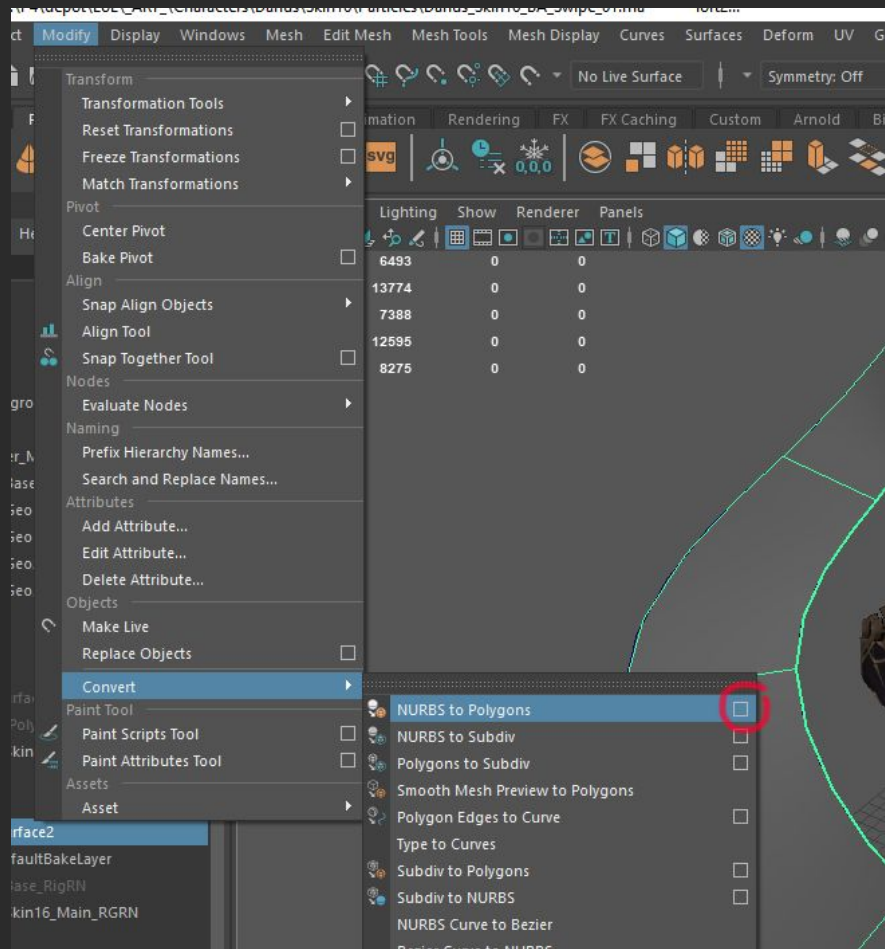- Now select both of the curves and go to
  Surfaces -> Loft

  现在选择两条弧线并且到Surface->Loft

- Result 结果

- We now have a NURBS surface. However, we
  want a Polygon instead

  我们现在有一个NURBS表面。但是我们其实想要多边形

- Step 4: 第四步
- With your NURBS surface selected, go to Modify -> Convert -> NURBS to Polygons **and click the little square** □

 选取你的**NURBS**表面, 去**Modify -> Convert -> NURBS to Polygons** 并且选取这个小方格

- There are a number of options we can select from here, depending on the complexity of the swipe.

  这里有很多选项可以选择，取决于刀光的复杂度。

- You may experiment, but the one that I use most often is "General"

  你可以实验，但是我最常用的是"General"

- You should then set sensible numbers in the Tesselation controls. These are good defaults
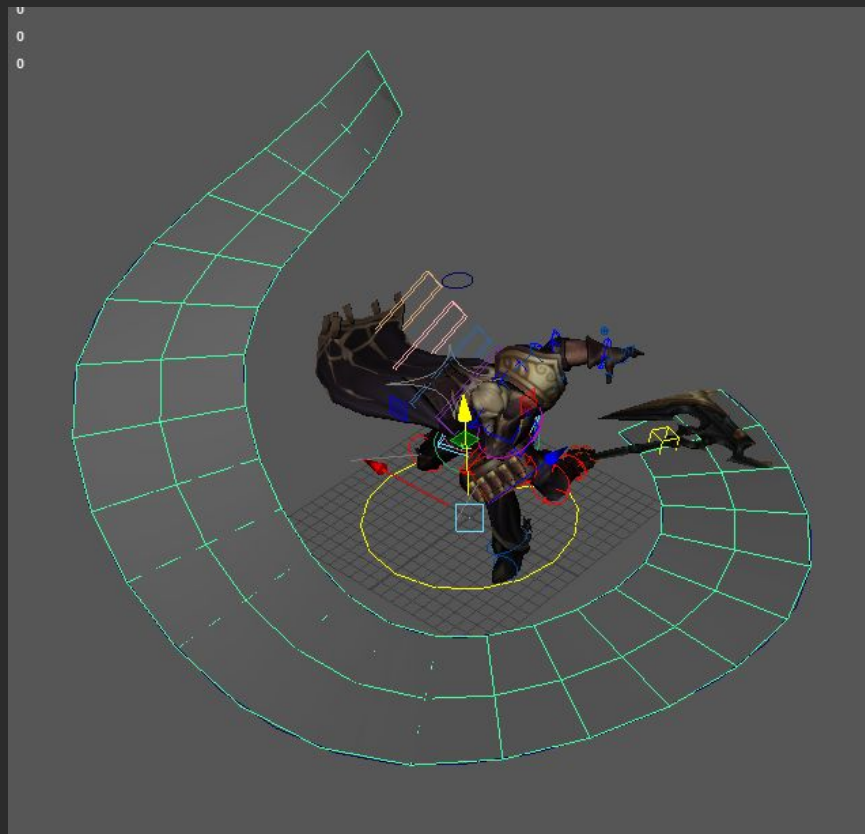
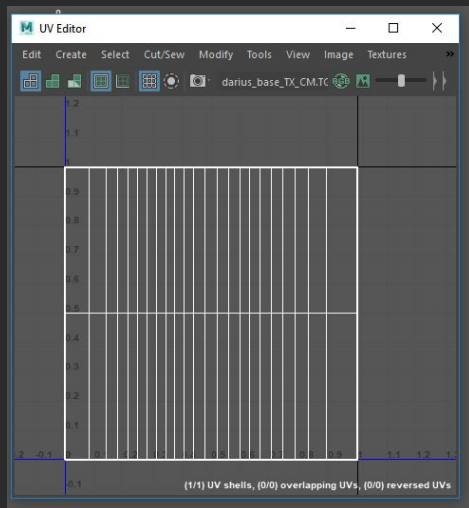 接着可以在Tesselation控制底下设置合理的数字。通常这些默认都不错。
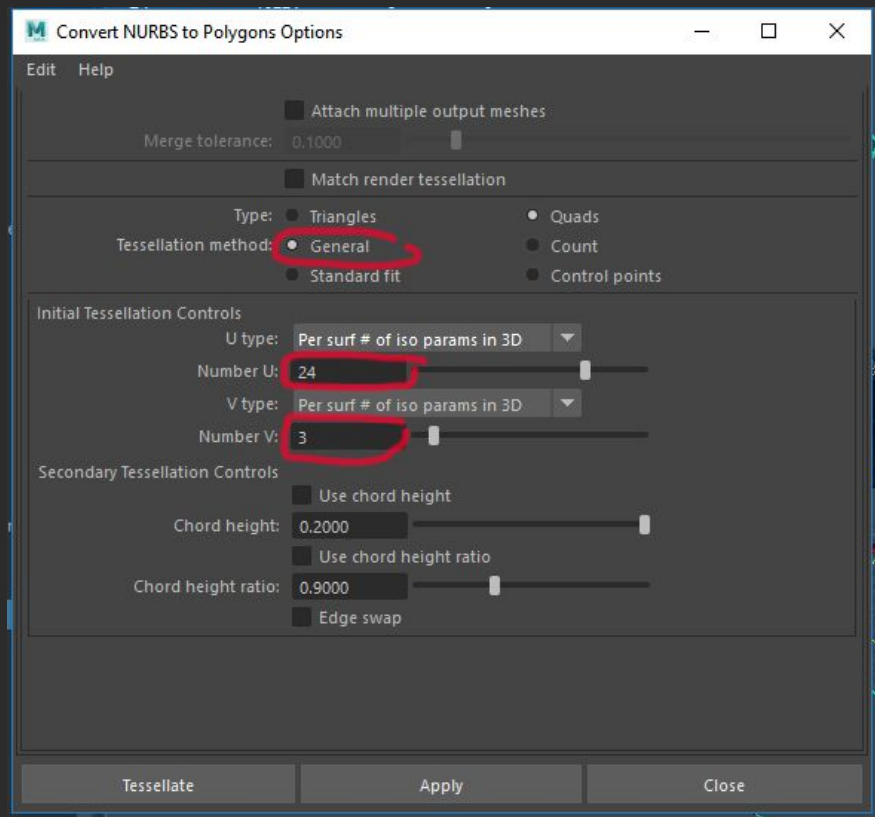
- Result 结果
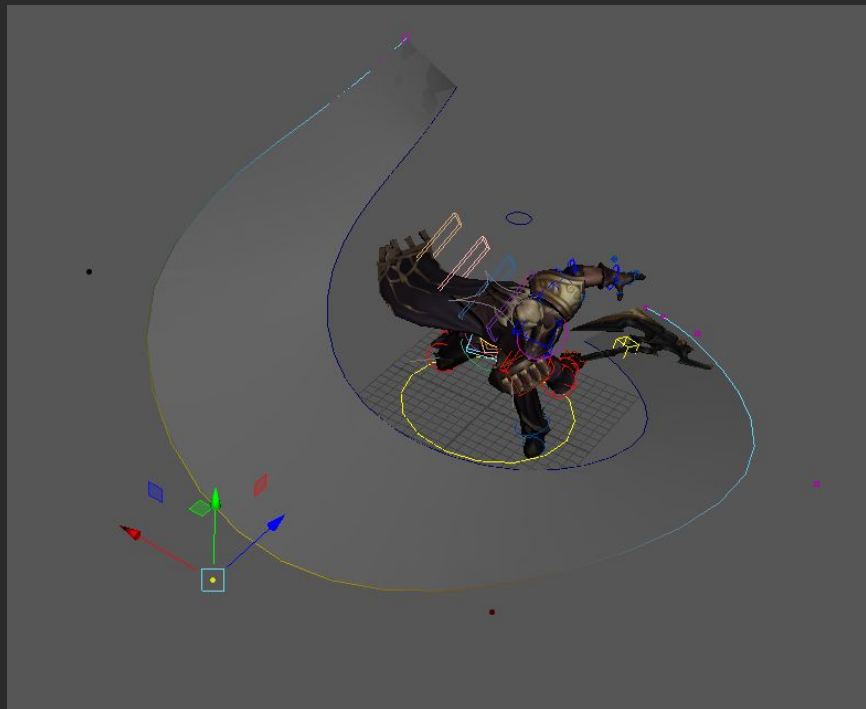
- You now have a polygon swipe which will have good UVs!
  现在就有一个刀光多边形同时有好的**UVs**

- We can still adjust it now however 我们还是可以调整它

- You can go back and edit the curves to make the swipe bigger, smaller, etc, and it will update the polygon!

你可以回头编辑这个曲线让这个刀光更大或更小，同时它会更新这个多边形！

- You can also go to the Channel Box with you polygon selected, and you can increase the number of polygons if it is too simple, or decrease them if it's too high poly.

你也可以选取你的多边形然后去Channel Box, 如果觉得形状太简单或太高面数的话, 可以增加或减少多边形。
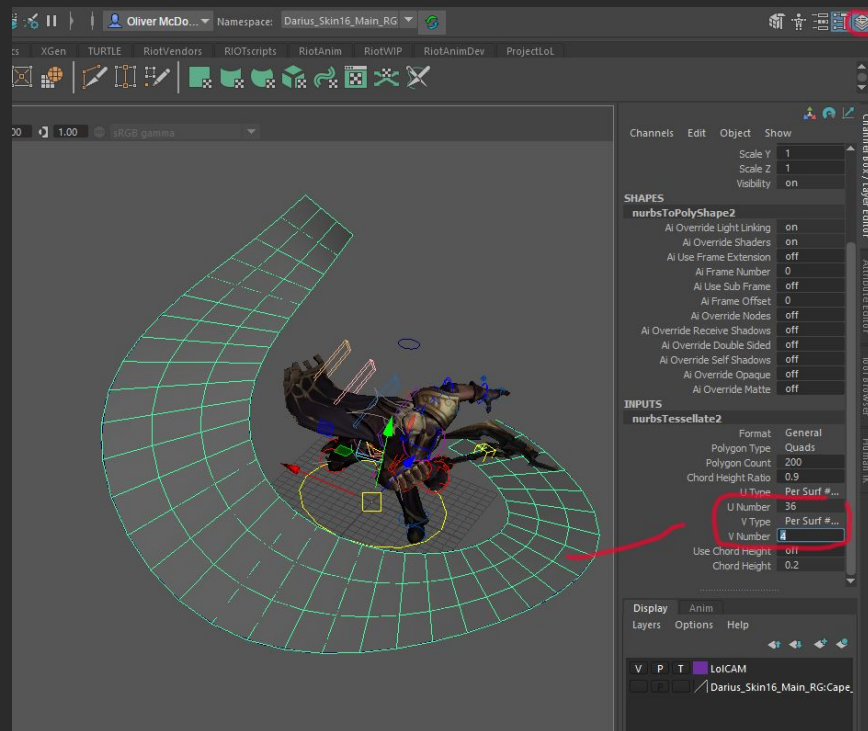
- Try to keep it at a reasonable polygon count however. 600 is the maximum, but try to keep a swipe at <300 Tris if possible

  尽量保持一个合理的多边形面数，最高600，但是如果可能的话尽量让刀光<300

- If you don't have these statistics in your maya, Select Display > Heads Up Display > Poly Count.

  如果你在Maya看不到这些数据，请选择Display > Head Up Display > Poly Count.
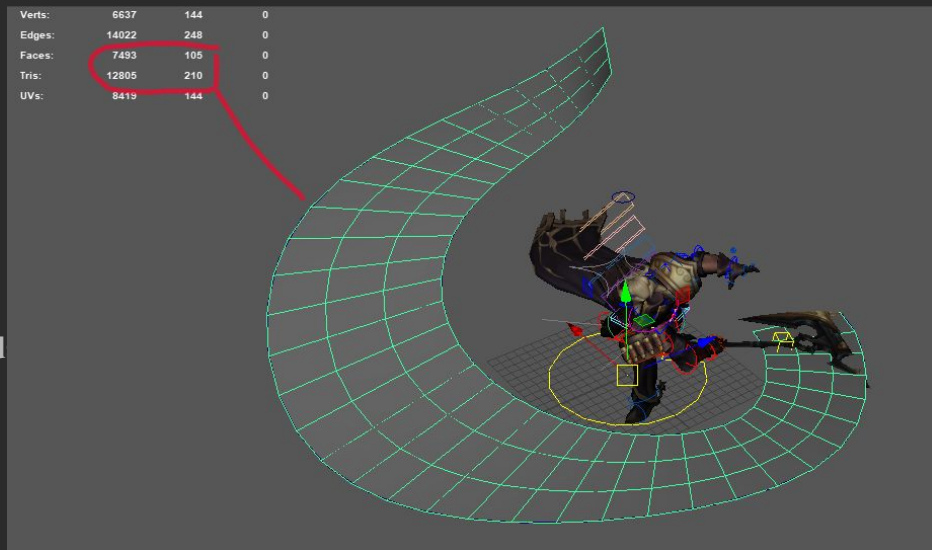
- Step 5 第五步
- Now we need to paint the vertex colours to fade out the edges
  现在我们要来给点上色来淡出边缘
- If you mesh is simple, just do this by going to Mesh Display -> Apply color and click the box ▢
  如果你的模型是简单的, 只需要去**Mesh Display -> Apply color** 点选这个小框框
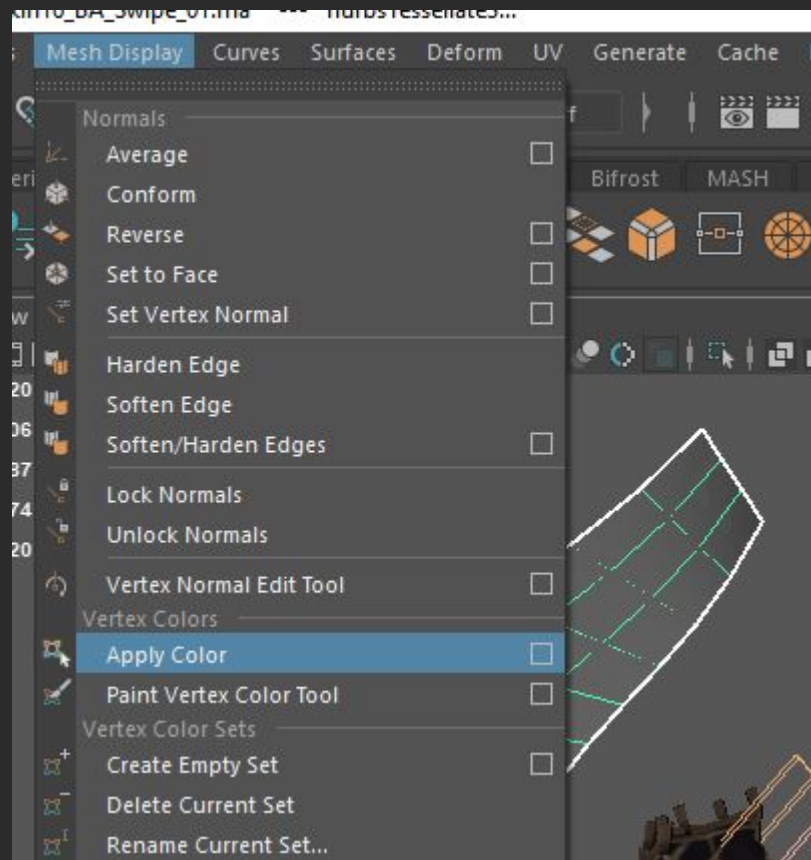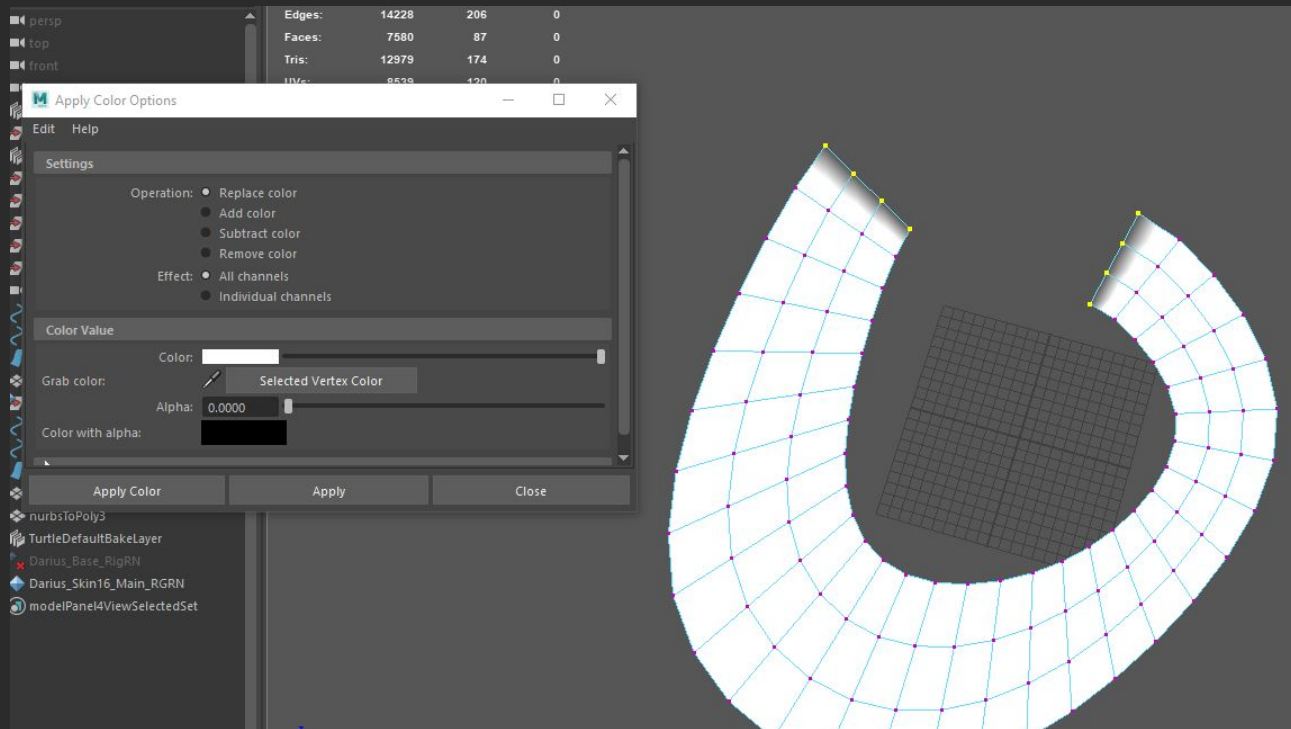
- First paint the whole mesh white with 1 alpha
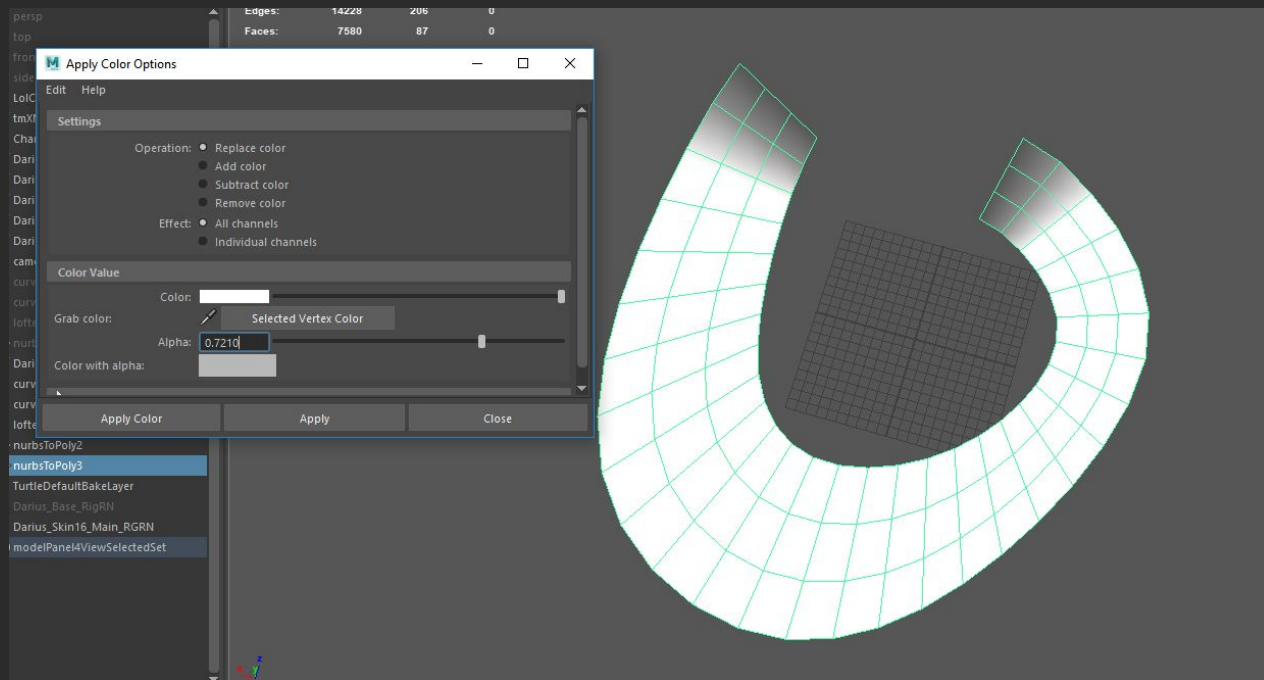
  首先用**Alpha 1**（透空）把整个模型涂白
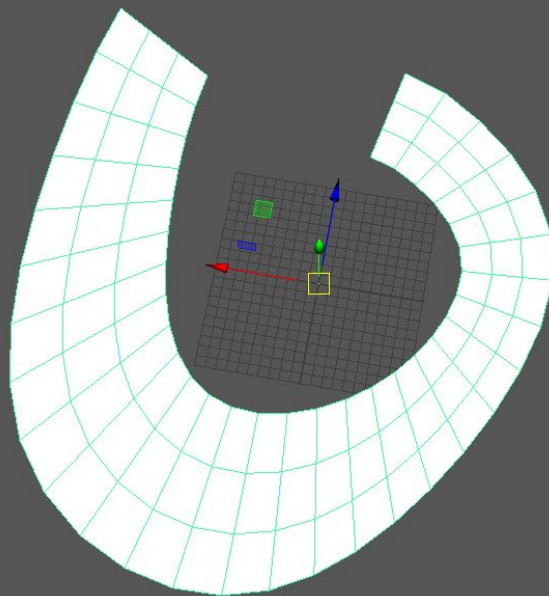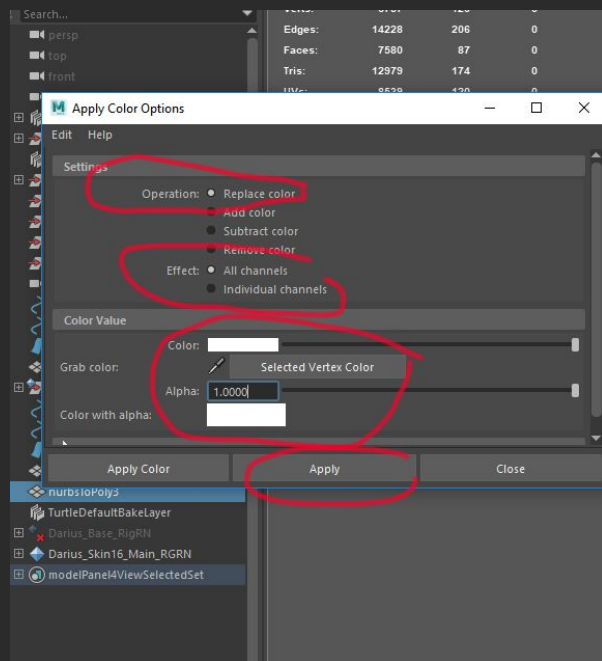
- Then paint the edges with 0 alpha

  然后用Alpha 0 画边缘

- You may paint some alpha in between to make the blend smooth if you wish

  如果你想要的话也可以在之间使用alpha平滑融合

- Step 6: 第六步

- Now save your mesh to your character's
  particle folder
  保存模型到角色的粒子文件
  夹里

- Give it a sensible name
  给他一个合理的命名

- Now it's time to export your mesh
- **For unreal - export as FBX**

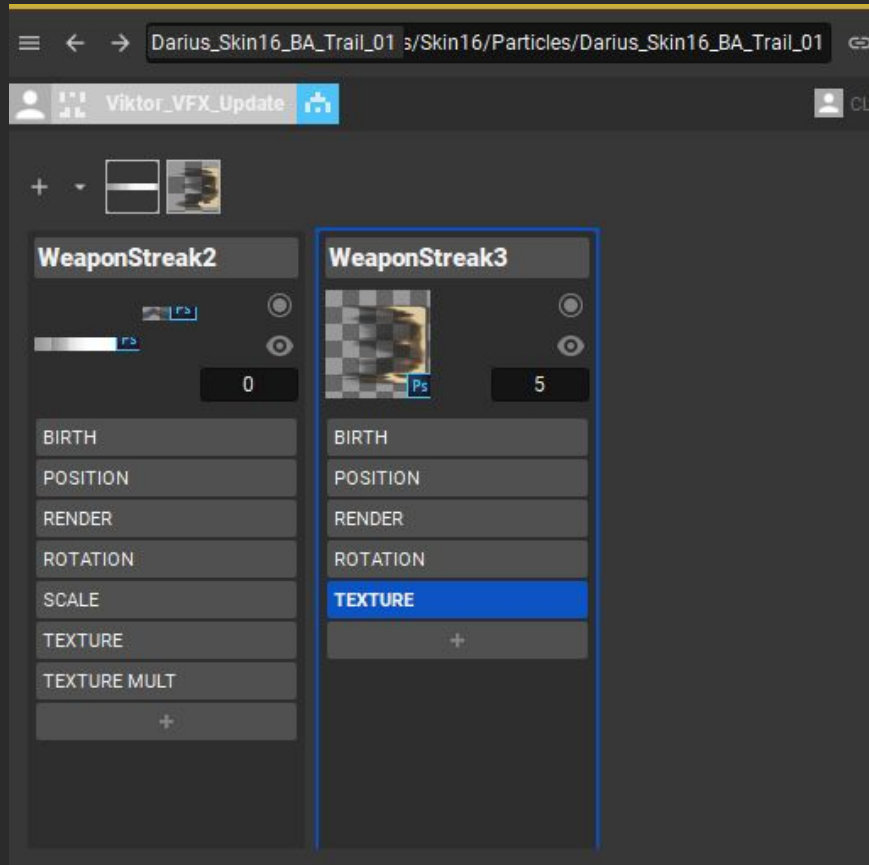- Your mesh should now be ready for use in Riot Editor or your Game engine of choice!

  你的模型现在应该就可以在拳头编辑器里使用

- This is what the Texture components look like for our swipes.

  They have a texture which is panning along the length of the UVs.

  The one on the left uses a tiling smoke, with a mask that pans along its length. This allows you to make the smoke look like it translates along with the motion of the swipe.

Result 结果

Particle System Preview

0.84ms

0.06ms Sim

RESTAR ▷ Speed 0.300 ☐ Motion ☐ Target ☐