**Unreal Engine Memo**

**Unreal PBR Material**

Reference : RBGore! Substance Painter to Unreal Engine 4\_ Workflow and Rendering

* In Contents: Drag-and-Drop the Model
* In Contents: Create a new Material
* In Contents: Drag-and-Drop the textures
  + Uncheck sRGB for AO\_Roughness\_Metallic only (not for Albedo, Emission…)
  + and before dropping the texture to the Material Graph
* On In Contents: Create a new Material
* In Material Editor: Drag-and-Drop the textures, they become Texture Sample nodes

**Making actor grabbable**

Reference: VR Playground - 089. How to Use the Grab Component in the Unreal Engine VR Template

* Add a ‘NewGrab’ component (Blueprint) to the Static Mesh, and give it a unique name
* Instance: Transform > Mobility = **Movable**
* NewGrabComponent: Default > GrabType = Free

If the grabbing does not work (e.g. for flat objects):

* Double-click on the Static Mesh
* Collision > Add simple collision box
* E (to display the Scale gizmo) and then upscale the thickness

To edit an existing collision:

In the Mesh Editor viewport, click on Show > Simple Collision

To add the actual gravity:

* On the instance component?: Physics > Simulate Physics = ON

**Display wireframe**

Show ? > Advanced > Mesh Edges

**VR template changes**

VR Template > Blueprints > VR Pawn

***To reduce the “Snap Turn” degree amount:***

**Snap Turn** function > Open Graph

* Snap Turn Degrees: - 45° > -30°

***To change teleport handling from right to left controller:***

* Within “Movement AxisInput Right – Teleport”,
  + Add a new ‘Input > Axis Event > “MovementAxisLeft\_Y”’
  + Replace (by link reconnections) the former “InputAxis MovementAxisRight\_Y“ by this “InputAxis MovementAxisLeft\_Y”
  + Add a new ‘Collision > **MotionControllerLeftAim**’
  + Replace (by link reconnections) the former **MotionControllerRightAim** by the new **MotionControllerLeftAim**

***To display the laser beam:***

* Default Scene Root > MotionControllerRightAim > WidgetInteractionRight
* Set “Debug” to TRUE, and ajust Debug Color, Line Thickness...