

Ryan Ruiz - Demo Reel Breakdown

Fur/Cloth Sim MFA Thesis WIP

00:00 – 00:04

Tailored Garments, Fur Groom, and Simulated Cloth/Fur. Connecting elements from Marvelous Designer, Maya, and Houdini.

Tailoring Snapshots

00:04 – 00:08

Tailored in Marvelous Designer using Patterns as reference. While at Blue Sky Studios, I re-tailored the outfit for Tulio from Rio.

Hair Sims

00:08 – 00:20

While at Blue Sky Studios, I compared nHair vs fxHair (a plug-in from FX Gear). After adjusting numerous parameters from both sims I achieved a similar result.

Custom Collider Tool

00:20 – 00:28

Tool created in Houdini to use for speeding up simulation times of collider geometry. My tool can make a high rez a low-poly sim collider for cloth or RBD. .OTL tool can be imported into Maya using Houdini Engine.

Dress Tailoring and Simulation

00:28 – 00:33

After buying a dress that did not fit someone, I was inspired to re-create it in 3D. After taking photos for textures and patterns, I tailored and simulated the dress in Marvelous Designer.

Collaborative Short Film “Leave With Me”

00:33 – 00:42

Created a cloth pipeline for the main character’s dress. Cloth Simulation, Blendshapes, and post-sim cleanup were used to create the stylized effect to match the tone of the film.

Cloth Sim Interact with Cliff

00:42 – 00:55

Created in Houdini and Nuke. Point Cloud and Camera Tracking used to create a collider inside Houdini. Created a cloth simulation within Houdini to collide to cover the live-action plate.