



Frozen Margarita

0:01 - 0:05 | Software: Houdini, Fusion, DaVinci Resolve

- Simulated lime cell growth using Vellum and removed internal geometry to create water filled capsules with increased transmission while preserving the outer skin layer.
- Generated slushy ice and frozen condensation using 3D noise-driven displacement.
- Built procedural lime textures by deriving heightfields from lime geometry.

Roles: Procedural Modeling, Lighting, Lookdev, Compositing, Color



Eye Meniscus (Tear Fluid)

0:05 - 0:13 | Software: Houdini, DaVinci Resolve

- Developed a procedural, physically-based eye layering system (cornea, tear fluid, eyelid) using raycasting to snap contact points with art-directable parameter controls.
- Authored custom VEX/HScript tools to drive deformation, layering, and interaction behavior.

Roles: Tool Development, Procedural Modeling, Animation, CFX, Lighting, Lookdev, Color



Stick It to the Man | 3D Animated Short Film

0:14 - 0:24 | Software: Houdini, DaVinci Resolve

- Procedurally modeled & rigged the character to support rapid design iterations.
- Simulated the keychain tail using Vellum hair and point deform to drive secondary motion.
- Manually animated camera movement, f-stop, and focus distance for cinematic look.

Roles: Character Modeling, Rigging, Layout, Motion Editing, CFX, Camera Animation, Color



Roman Swords

0:24 - 0:28 | Software: Houdini, DaVinci Resolve

- Developed a procedural modeling system driven by parameter controls in an HDA interface.
- Implemented character-based adaptive scaling of sword's size for relative scale accuracy.
- Designed user-facing toggles, menus, sliders, and buttons to generate a wide range of sword designs from a single cohesive system.

Roles: Tool Development, Procedural Modeling, Lighting, Lookdev, Color



Magic Show Curtains

0:28 - 0:33 | Software: Houdini, DaVinci Resolve

- Built a procedural modeling system to generate the curtain fabric source geometry.
- Developed an animatable grid-based anchor/pinning system that drives the Vellum simulation.
- Created a Pyro simulation of thick theatrical fog.

Roles: Tool Development, Procedural Modeling, Layout, FX, Lighting, Lookdev, Color

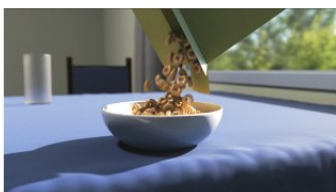


Dining Room Curtains

0:33- 0:37 | Software: Houdini, DaVinci Resolve

- Procedurally modeled the environment.
- Applied the curtain HDA to create a Vellum simulation of the curtains opening.
- Draped the tablecloth using Vellum.

Roles: Tool Development, Procedural Modeling, Layout, FX, Lighting, Lookdev, Color



Cereal

0:37 - 0:40 | Software: Houdini, Fusion, DaVinci Resolve

- Procedurally modeled the tabletop objects.
- Created the RBD simulation of cereal pouring into the bowl.

Roles: Procedural Modeling, FX, Lighting, Lookdev, Compositing, Color