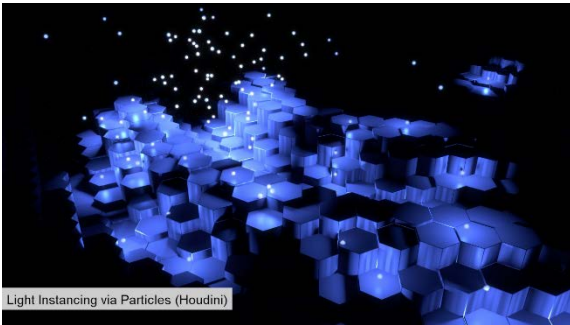


RBD Simulation (Houdini)

Rube Goldberg Machine RBD Sim

Created in Houdini 14. Bullet RBD Solver. Used low-poly proxy colliders to speed up sim times then replaced with more detailed geo after cache. I referenced a Japanese TV show “Pitagora Suichi”. Responsible for all aspects.



Light Instancing via Particles (Houdini)

Light Instancing via Particles

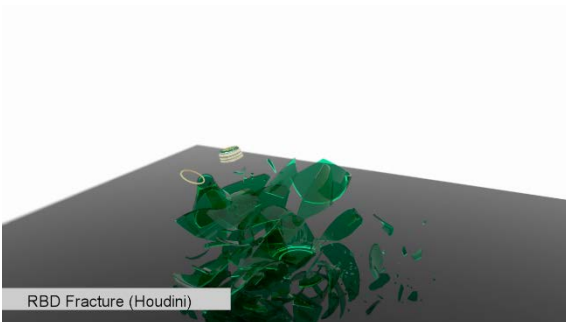
Created in Houdini 15. 150 sphere lights were instanced onto particles. The particles were guided along a curve path and goal object attracted the swarm of particles. A low poly collider object was used to make the particles stick to the environment. Responsible for particles and look development.



RBD Sim Light vs. Heavy (Houdini)

Jenga RBD Sim Light vs. Heavy

Created in Houdini 14. Packed RBD objects were used for Jenga blocks. After the cache, I switched the low-poly proxy geo with blocks of high subdivisions and bevel. Density, Friction and other parameters were adjusted to show the difference in weight between wood and metal blocks. Responsible for all aspects.



RBD Fracture (Houdini)

Perrier Glass Bottle Shatter RBD Fracture

Created in Houdini 15. I utilized RBD Fractures with voronoi patterns to shape the shatter. I painted areas of the bottle to make tiny shards of glass. Simulation was cached in 0.01 increments to slow it down 100 times.



Cloth Sim & Tailoring (Marvelous Designer)

Dress Sim and Tailoring

Created in Marvelous Designer 5. I tailored the dress and added a dress texture. I then simulated the dress with a motion capture avatar (from MD5 library). Cloth parameters and tailoring were adjusted to create a smooth believable dress movement.