

LUKAS LUNDBERG

FX REEL SUMMER 2012 BREAKDOWN

1-7. Stargazer (2011)

Mentor shot at Side Effects Software, Los Angeles.

1. Fluid & Rigid Bodies

FLIP sticky fluid with trails. Generates splat fluid surface area on impact. Rigid Bodies with constraints generates wiggle motion on impact. All lilies in scene wiggle from wind.

2. Infection

Based on the fluid collision. Several color spread attributes to control the infection for bubbling, bend, eat, break, shaders, particles and smoke.

3. Bubbling

A static noise for generation of the bubbling pattern, and an animated noise to drive the displacement from the pattern.

4. Bend, Eat & Break

Cloth, wire and SOP solvers for breaking, eating and bending the petals and the stems.

5. Procedural Shaders

All shaders procedural, based on UV, geometry curvature and the infection spread. Changes of color, alpha, bump and specular from the infection spread.

6. Particles

Attributes to control range of randomness for sizes and velocity.

7. Smoke

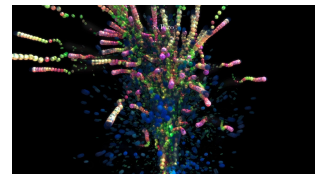
Wispy smoke behaviour. Smoke also generates steam layer.



8. Pyro (2012)

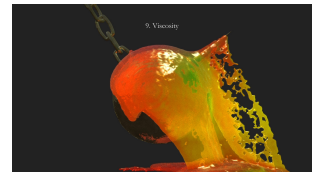
a,b) The skull shape is from a painted image transformed into a SDF for collision with the pyro simulation.

c) The spheres are driven by a smoke simulation. Added details as trails, custom shader based on attributes.



9. Viscosity (2012)

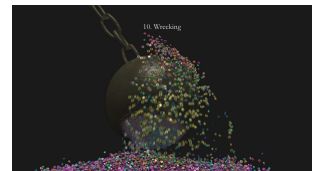
a,b) RBD wrecking ball interaction with FLIP fluid simulation with high and low viscosity settings. Custom shader based on the velocity and the fluid thickness.



9. Wrecking (2012)

a) RBD wrecking ball interaction with Bullet solver for 13k instances with three different geometry types. Custom shader based on the type and the velocity.

b) RBD wrecking ball interaction with a voronoi-fractured object. Smaller and bigger chunks based on the impact area. Smoke emission from the faces that gets deleted over time.



9. Crowds (2012)

a) The implementation of Boid agents with a predator/prey pattern is written in Python. The predator sight is visualized with a blue wireframe sphere. The colors of the prey are based on the distance to the predator.

b) The fish flocking system is particles with random velocity following a leader particle. Custom random shaders for the fish and plant stripe patterns and colors. Magnets with meta balls pushes the plants to wiggle. Flow around objects and SDF collision to push the bubbles around.



My involvement: All

Software & Scripting: Houdini, Nuke, Maya (for the bird and fish model) & Python