

### **Crowds Project**

This traffic system is created using pop solver with modular VEX snippets. The state manager node evaluates all the available data to make decisions for each vehicle. The system features traffic lights, stop signs, pedestrians and vehicles yielding to others. Reference footage is from a real roundabout in Bicester, UK.

The setup was used by Method Studios Montreal in some Wonder Woman 1984 shots. Project featured on 80 LEVEL. Presented at the Worldwide HUG.

- Created all elements except the vehicle assets.
- Coded in VEX.
- Redshift lighting and rendering. Nuke compositing.



### **RBD** Project

This project started by doing some research on the building structure for this type of house, most importantly the interior wooden frame. I designed the constraint network with very specific placement of constraints, giving more control when it comes to art direct how and when pieces detach. With the main simulation done, I added glass and dust. Reference footage is from a house collapse in 1965 San Francisco after a landslide from heavy rain.

- Created all elements.
- Procedural house geometry. Procedural constraints replicating real world construction methods. Secondary simulation for glass and PYRO.
- Redshift lighting and rendering. Nuke compositing.



## **FLIP Project**

I wanted to experiment with the flip tools and workflows and instead of just creating an infinite ocean I thought I could make something a bit more interesting to look at. It's a simple wavetank setup using the bottle as a collision volume to keep the particles inside the bottle. The motion is created by the velocity volumes made by the ocean spectra.

- Created all elements except the boat model.
- Vellum cloth and wires simulation.
- Mantra lighting and rendering. Nuke compositing.



#### **Magical Effect Project**

My take on creating a spaceship protective energy shield. The effect was created combining POP simulations, a ripple solver and a SOP solver to handle its different elements.

- Created all elements except the Rocinante model and the background plate.
- Redshift lighting and rendering. Nuke compositing.



# **Group Project**

In this project we worked together to create a disintegration effect that resembled the vampire disintegrations seen in the Blade movies.

I was responsible for creating the growth mask that all team members used to run their effects from. I was also responsible for creating Rigid Body Dynamics for the disintegrated bodies.

I made a base setup that was then reused on the 10 shots that we worked on.



### Procedural Geometry Project

About 75% of this project is based on working with points and lines. Using standard Houdini nodes and some VEX to define root points, branch growth and end points to instance leaves and bunches.

- Created all elements.
- Redshift lighting and rendering. Nuke compositing.



# **Procedural Shading Project**

A deep dive into COPs. Explored setting up and modifying custom coordinates to drive noises and patterns. Point clouds were also used, turned out to be a quick and simple way to create the dots on the orange skin and other elements.

- Created all elements.
- Mantra lighting and rendering. Nuke compositing.



#### **Character FX Project**

Challenged myself to recreate some of the effects seen on Major Lazer's Light it Up videoclip made by Method Studios.

- Created all elements except the animation MoCap.
- Vellum Simulation Setup.
- Redshift lighting and rendering. Nuke compositing.