

# Class Project 4 – Bifrost Simulation

## Description

**Problem** – Create a short animation on an area focus. You must either extend what we have learned in class or choose a new topic.

**Solution** – To solve this problem, I decided to do a water simulation. I did this because I love simulations/FX and have heard great things about the new Bifrost Liquid simulation engine for Maya. To start out, I first used the Maya help docs to research Bifrost and how to get it working. Then, messed around with the settings to make sure I understood what each slider did. Next, I decided I would like to do a simulation of water going down a river bed and hitting some rocks. I first modeled the riverbed by sculpting a high poly plane. Next, I applied a displacement texture to add more detail. Then, I extruded the plane down for a proper collision object. After that, I modeled the rocks by scaling spheres, adding displacement, and smoothing them out. To create the water simulation, I used the shelf tools and a sphere as the emitter. Next, I added the riverbed and the rocks as colliders. After that, I baked out the simulation. Then I created textures for all of the objects and used the paint effects tool to add in more scenery. Finally, I added a directional light, camera, and rendered out the final product.