

SmokeSimulator

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Project Summary

Our goal with this project is to create an interactive smoke simulator with adjustable parameters (gravity, pressure, density, temperature, etc.) that realistically simulates smoke, including collisions and shading. In addition, we want to allow ‘smoke interaction’ objects to be placed within the scene and continuously generate/attract smoke.



Progress

We currently have the scene set up in Three.JS, alongside a simple GUI (dat.gui). Right now we are implementing the shaders (using WebGL) and smoke generation (using Navier-Stokes, as described in

https://developer.nvidia.com/sites/all/modules/custom/gpugems/books/GPUGems/gpugems_ch38.html)

