

Chrysaora: WebGL Jellyfish Simulation

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Chrysaora is a real-time jellyfish simulation created entirely with web technologies such as javascript, WebGL, websockets and CSS. It uses realistic rendering and simulation techniques similar to those used in modern 3D video games, but it can run in an internet browser on any operating system. It takes advantage of WebGL API to deliver real-time hardware-accelerated graphics to the browser. At the same time, Chrysaora uses the latest web-socket technology for full-duplex communication over a single TCP socket to establish real-time synchronization across multiple browsers. This enables the application to render different parts of the scene on multiple computers while they are being synchronized by a remote server in real time.