

AudioViz

<http://macobo.github.io/WebGL-Audio-Visualization>

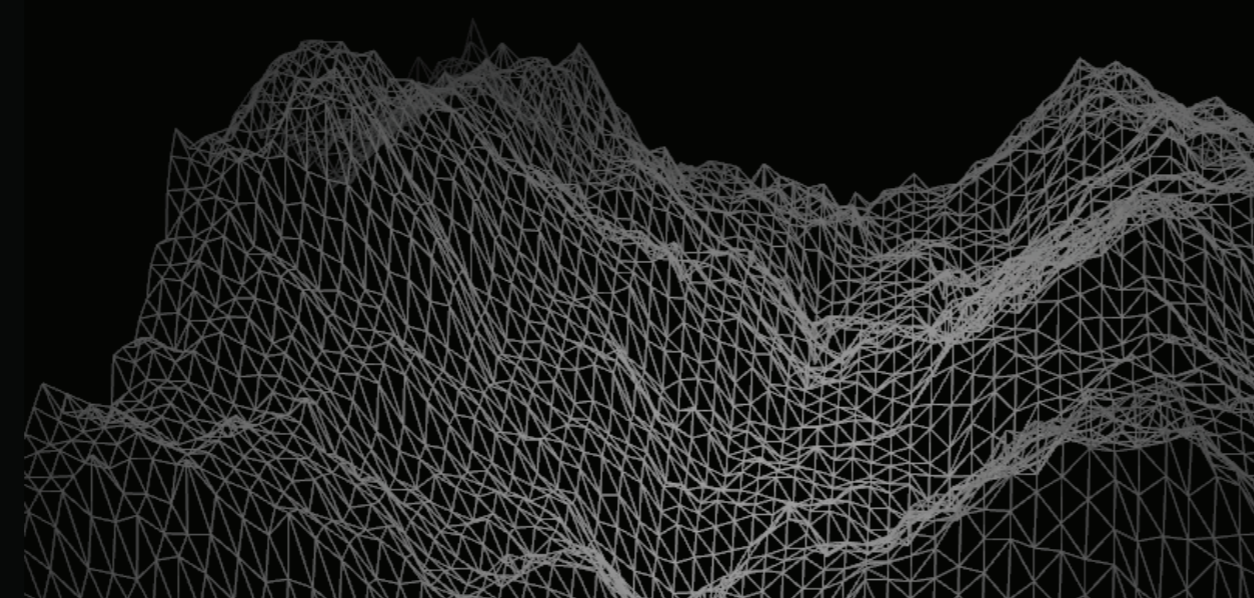
Music visualization is a creative task that needs knowledge of computer graphics, audio and human perception. We implemented an online visualization that streams songs from SoundCloud and has several different visualization that users can experience.

Particles and Terrain

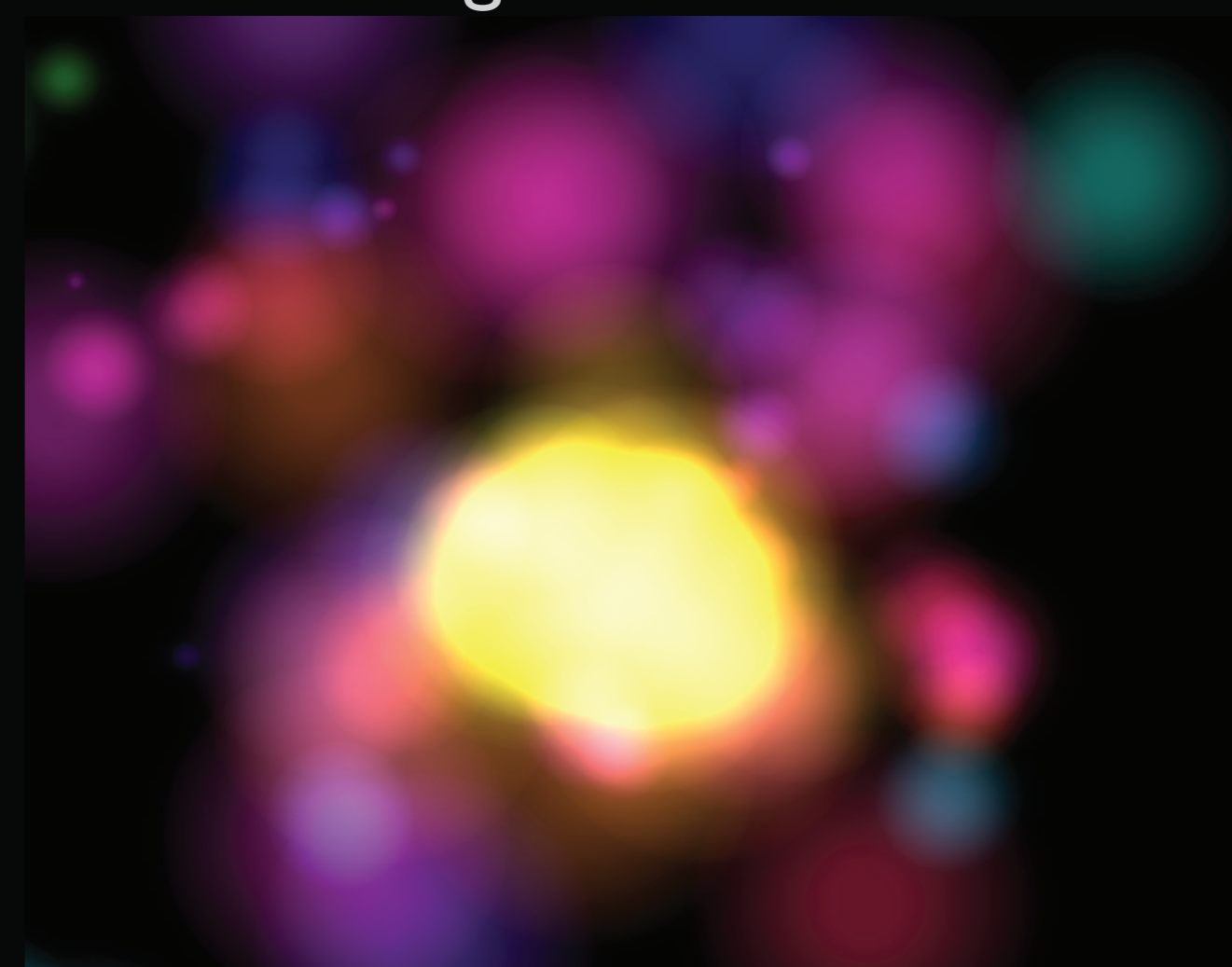
Both of these visualizations use a beat detection algorithm to coincide with the playing song. Particles are generated and move at different rates depending on the tempo of the song. Terrain visualization consists of a moving camera and a changing grid depending on both the spectrum of the song and beat detection.

PLAYLIST

1. Marilyn Manson - You Spin Me Right Round
2. Metallica - Nothing Else Matters (Classic Symfonic Version)
3. Celldweller - Frozen (Celldweller vs Blue Stahl)
4. Disturbed - Indestructible
5. Jem - 24
6. No-Big-Silence: Imelik masin
7. 03 Cruxshadows - Marilyn, My Bitterness
8. Turmion Kätilöt - Verta ja lihaa
9. Digital Warriors
10. Beverly Hills Cop Axel Foley Theme - Metal/Rock cover version
11. "ROOSTE" VIDEOmix
12. Stone Temple Pilots - Plush
13. Redneck Rampage - Devil In Disguise [Shotgun INC]
14. IN FLAMES - Deliver Us
15. IN FLAMES - Deliver Us (QR Code)
16. Alien Ant Farm - Smooth Criminal



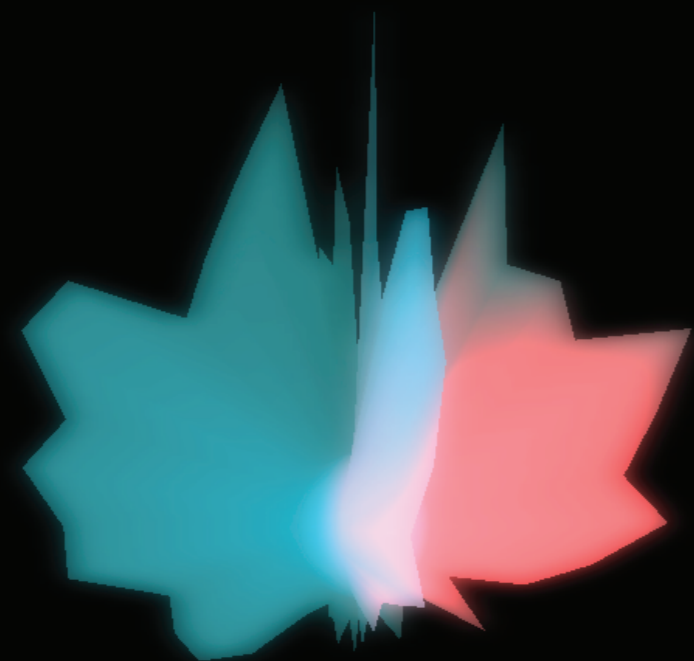
Terrain



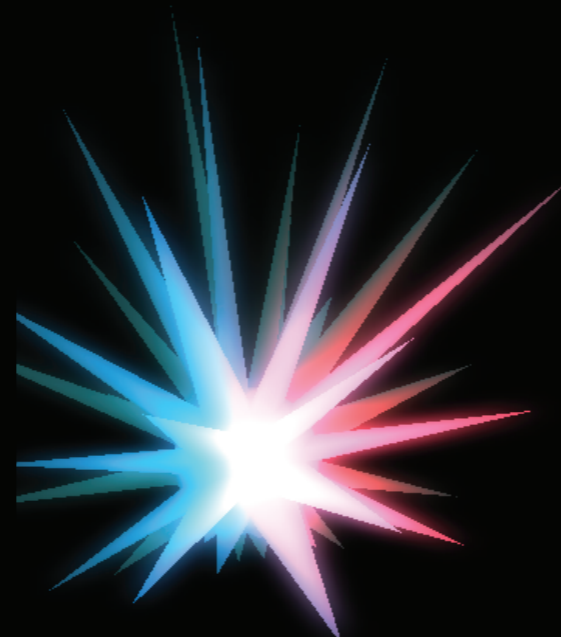
Particles

Angels, Hedgehog and Lotus

Those visualizations rely on the mapping of the song's spectrum onto a 3D sphere. Vertices of the approximation of the sphere are pushed outwards depending on the detected frequencies in the spectrum. Both the geometry and a point light source rotate around the central y-axis by taking into account the average power in the different parts of the spectrum.



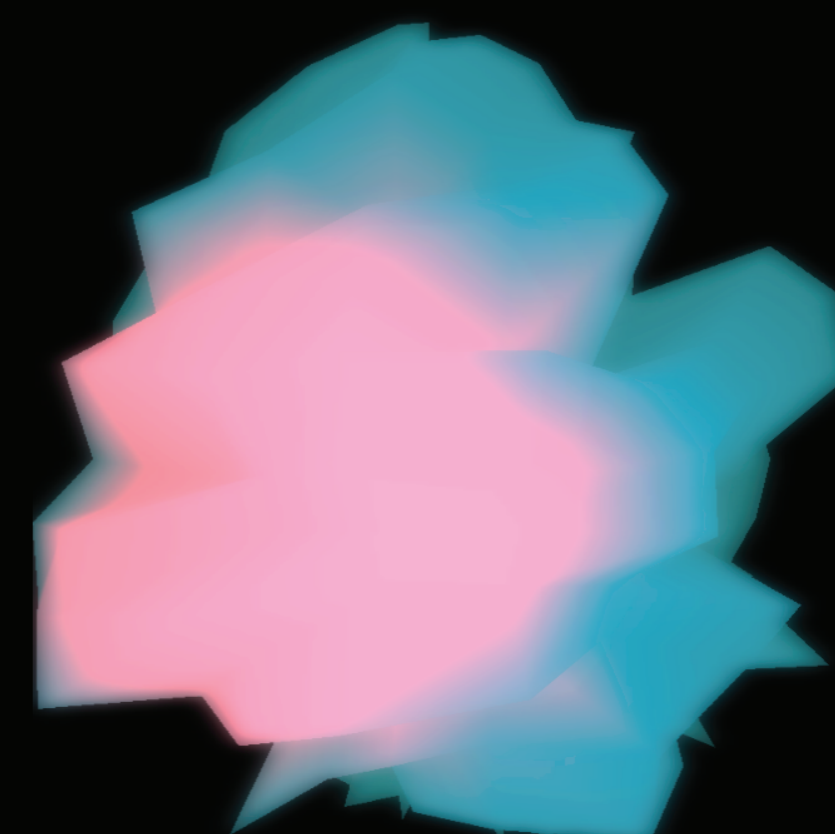
Angels



Hedgehog



Lotus



Lotus

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Project is managed in github.com: <https://github.com/macobo/WebGL-Audio-Visualization>



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