

music-visualizer-vr

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Click [HERE](#) for Demo

- Upon page load, click play button to start visualization
- Mess around with x and y controls
- Click “Add Modulator” to add a new modulator
 - no actual functionality yet

About the modulator

The modulator is inspired by modular synthesis where you can modulate sound signals using different functions. It has 5 components:

- **Source:** This specifies the source of the data that will be used to modulate the *destination*
- **Destination:** This specifies the object to apply the modulation to.
- **Destination Paramer:** This specifies which parameter of the object should be modulated

About the Spectrum Analyzer

The spectrum analyzer is the brains of the audio parsing. It uses `THREE.AudioAnalyser` to compute a Fast Fourier Transform (mapping amplitude to frequency) for every call to the animation loop.

The frequency ranges (e.g. Bass, Treble, Volume) are then calculated by averaging the amplitude values in a set range.

Upcoming features

- Ability to add modulator x and y controls as destinations.
- Separate modulator into 3D and 2D modulators
- More objects?

References

- THREE.js audio visualizer example
- THREE.js audio visualiser by santosharron
- ChatGPT
- UMass Boston CS460!