

## Project Title

# e·lec·tro·mag·net·ic pulse

## Project Statement

*Word Count = 399*

e·lec·tro·mag·net·ic pulse is a light installation, super-imposed on silicon chipset pathways, that uses sine waveforms, interactive sound capture systems, and wearable technology (with varying amplitude, frequency, lighting, and color) to create a feeling of energy, movement, and wonder. It's a non-denominational, non-racial, non-binary, and multi-ethnic form that welcomes global and diverse communities.

As an example of civic pride, if e·lec·tro·mag·net·ic pulse had been installed before the current COVID-19 emergency, San Jose, in solidarity with other communities, may have used its blue light colors to thank front-line workers. It can be a beacon for any initiative or community gathering San Jose may desire.

San Jose's tech roots start with electronics – and electronics form the basis of the technology revolution which harnessed science, engineering, math, and the arts to change the world through disruptive innovation.

The e·lec·tro·mag·net·ic pulse sine waveforms and silicon chipset pathways symbolize the electronics that are at the heart of San Jose's tech prominence and the disruptive societal changes that have come about in the past 50 years due to technological advances.

Also, sine waveforms have a communications and signal processing component that is a large and growing part of today's tech. As the COVID-19 stay-at-home orders have proven, people all over the world are grateful for the amazing technologies that allowed them to communicate and share their experiences, to connect in helpful ways, and to know they are not alone. From the beat on a music audio spectrum analyzer to the beep on a patient monitor, sine waveforms are associated with human life.

As importantly, the sine waveform is timeless. As a graph of the sine function, it has been around for at least 200 years. Since the technology of the future will be based on mathematical and physical principles, the sine waveform is a perfect representation of San Jose's past, present, and future.

During construction, the light, sound, and wearable tech systems will use few structural forms. Post-construction, solar energy will power the installation.

The light installation is a natural candidate for a strong visual presence at night (up close and at a distance) because the sine waveforms can be as tall as necessary to produce the desired impact. Having a strong visual presence during daylight hours will depend on the type of material used in the structural forms supporting the light installation.

Finally, the light installation will preserve much of the natural surroundings and habitat.