

Design and Development of Interactive Lighting Fixture for Art Installations in Urban India



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Abstract:

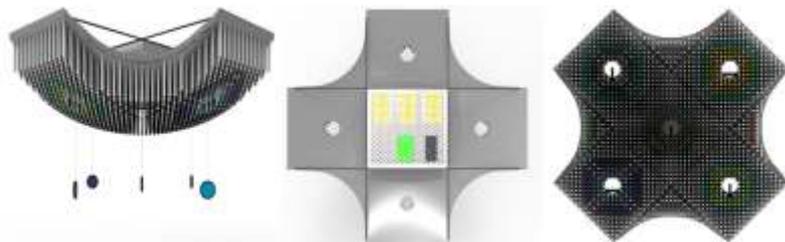
Interactive lighting system for public art installation is one of the emerging art forms all over the world. It is also finding opportunity especially in malls and other public places for its ease of acceptance by people due to its unique characteristics. This project aims to inhibit curiosity amongst people coupled with an opportunity to make the installation fixture interactive enables people to have an overview of how the product works thereby entertaining people and offering a relaxation with a new experience.

Many concepts were developed based on the understanding of crowd behaviour and the basic human tendency to react to a particular environment. The final concept so undertaken for prototyping aimed to attract users towards the installation along with the combined essence interacting and responding with them. A few strings were hung from the installation device where in a slight push or pull would trigger a circuit thereby producing a sequential array of light display, each pattern being pre-programmed into the circuit boards. The continuous array of lighting sequences passes through the Optical Fibres, which holds its unique characteristics with the play of light there by easily attracting attention and offer interactive environment to the user and the observers. Design of this incorporates the ergonomics and functionality to achieve the expected result, many hurdles were encountered and eventually resolved to ensure at the final design.

The proposed product was named as "LUMI". LUMI holds the optical fibres providing a an immense glitter to the installation device as the light passes through them in a variety of sequences achieving them through fibres raised high on the roof along with the user interacting and producing an aura of lighting pattern right above the user. The Prototype has been fabricated and validated with the user group and results were procure and satisfactory with an emphasis on aesthetics lighting.



Realistic view of interactive lighting fixture



Detail view of the product



Full scale working model