Abstract

Water fountains have been used for thousands of years for utilitarian and aesthetic purposes. Fountain design provides an excellent opportunity for multidisciplinary projects for engineering and art students. In this paper, a falling water system is designed for an indoor fountain with a special effect feature. This system produces letters of the alphabet, simple shapes, and symbols with water jets. A microcontroller is used and programmed to create and sequence through interesting arrangements of water displays. This paper offers the hardware and software parts of light fountain control system that adjusts the water heads. The fountain hardware system consists of Arduino MEGA 2560, relays, water valves, power supply to operate the electrical circuit, in addition to the iron structure of the presentation of the shapes. The software part consists of the visual basic language written in a PC device and C-Language written on Arduino device to control the falling water system. The experimental results are tested for different alphabetic words and graphical shapes.
References

141–148.


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Index Terms

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Falling Water, Fountains, Arduino microcontroller