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**Project | Zimbabwe Lightning Occurrences**

February 8, 2013

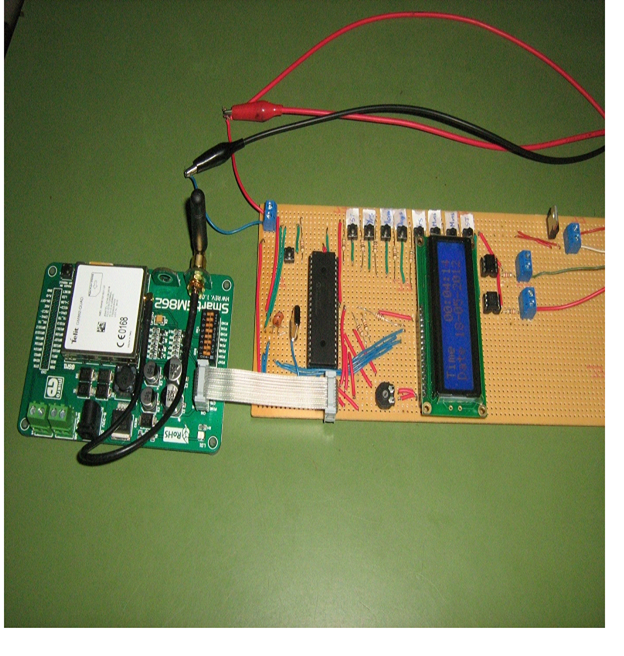
LOCATION: Zimbabwe | PROJECT LAUNCHED: 2012

[**http://epics.ieee.org/projects/project-zimbabwe-lightning-occurrences/**](http://epics.ieee.org/projects/project-zimbabwe-lightning-occurrences/)



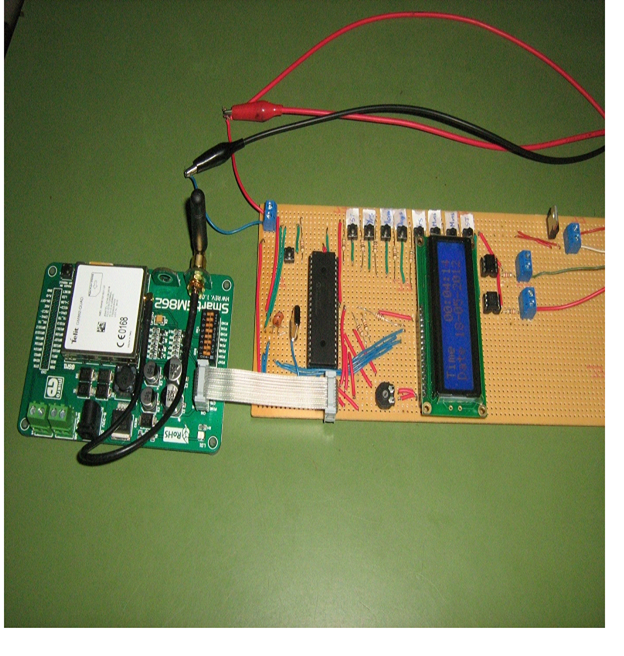
**PROJECT LEADS:**

Department of Electrical Engineering, University of Zimbabwe



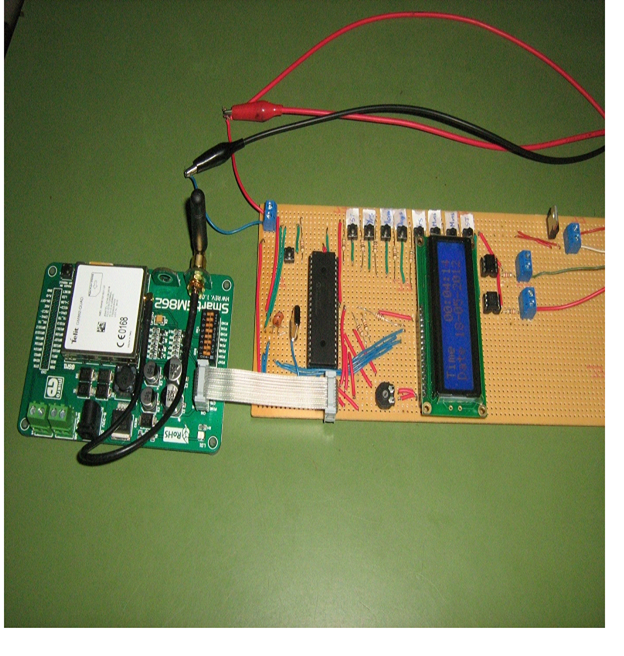
















**PROJECT OVERVIEW**

In Zimbabwe, lightning is cause to a large number of deaths annually. Due to underfunding, lightning research has come to a standstill. At one point, the Zimbabwe Electricity Supply Authority (ZESA) sponsored a program to install lightning counters in strategic locations, but they themselves failed due to logistical problems and the counters themselves had been damaged by lightning.

In order to revitalize this research, fourth-year students from the University of Zimbabwe, in the Department of Electrical Engineering, will design and build an intelligent electronic device (IED) which will detect lightning incidence and activity in select locations throughout the country. The device will aim to detect lightning occurrences, the location and the time of the event, and serve as an early warning sign to lightning occurrences and their severity.

The IED will also have an embedded SIM card and mobile radio technology so that it can convey detected information to a central location via GSM network. Overall, students will gain experience in design, high-voltage engineering and communications engineering.

The university students will work closely with the Zimbabwe Institution of Engineers, Meteorology Department and a local high school. The high school students will assist in surveying the work and information collected through the project, getting valuable exposure to engineering skills. ZESA will provide technical and logistical support.

**PROJECT PARTNERS**

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| --- | --- | --- | --- |
| |  |  | | --- | --- | | http://www.university-directory.eu/media/instlogos/ZW-University-of-Zimbabwe---School-of-Social-Work.png  Department of Electrical Engineering, University of Zimbabwe | http://zie.org.zw/wp-content/uploads/2016/02/Screenshot-509-Copy.png  Zimbabwe Institution of Engineers, Meteorology Department | |  |
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