

## **ABSTRACT**

### **REALIZATION MEASURING INSTRUMENT OF RAIN FALL WITH WEIGHTSCALE METHODE BASED MICROCONTROLLER ATMEGA32 AND DATA STORAGE USING MICRO SECURE DIGITAL (MICRO SD)**

**By**

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*It has been designed and realized the measuring instrument of rainfall using weightscale methode using flexiforce A201 1 lbs sensor. This measuring instrument designed for knowing the value of rainfall which fell down in a region. The voltage data from sensor which caused by the force changing influence has processed into volume then be produced to the rainfall value. The data of rainfall has processed by microcontroller ATMEGA32 which results displayed by the Liquid Crystal Display (LCD) and saved in the micro secure digital with 6 s of delay. The processing and the communication of data has been set by Microcontroller ATMEGA32 program with C programming language. The parameter in this measuring instrument form to the value of rainfall volume which used as reference value on the controlling of solenoide valve. This measuring instrument capable to read the minimum of volume changing up to 5 ml so that the value of measurement resolution was equal to 0,28 mm.*

**Keywords:** *Flexiforce, microcontroller, rainfall, volume*