PROJECT REPORT

On

A MICROCONTROLLER BASED SYSTEM FOR DETERMINING INSTANTANEOUS WIND SPEED AND DIRECTION USING JUDICIOUS INSTRUMENTATION

Sponsored by Karnataka State Council for Science and Technology (KSCST), Bangalore

Submitted in Partial fulfillment of the requirements
for the Eighth Semester of the degree of

Bachelor of Engineering
In
Computer Science and Engineering
Of
Visvesvaraya Technological University during the year 2011

Carried out by

PRIYANKA C G	**1SB07CS070**
RAMYA M S	**1SB07CS079**
SHRUTI A	**1SB07CS098**
SWATHI K	**1SB07CS106**

Under the guidance of

Dr. B. Shadaksharappa
Head of the Department
Dept of CSE, SSEC

Mr. Pradeep B Jyothi
Co-ordinator, HOD
Dept of EEE, SSEC

Department of Computer Science and Engineering
SHIRDI SAI ENGINEERING COLLEGE
Anekal, Bangalore – 562106

SYNOPSIS

A scheme for measuring wind speed and determining its direction has been introduced. Unlike the conventional systems used for this purpose, the system presented here uses magnetic switches to measure the direction and speed of wind using DC motor circuit and therefore is free from the problems introduced by speed limit associated with mechanical measuring devices.

The system uses the following instruments used in meteorological measurements for measuring wind speed and direction respectively: dc motor and wind vane. A microcontroller has been used to ease the required calculations for producing meaningful results from the data provided by the magnetic switches. The result is displaced on the computer screen.

The system is cost effective and is portable which gives a lot of advantage to the users.