VERTICAL AXIS WIND TURBINE DARRIEUS TURBINE DESIGN FOR LOW SPEED WIND

By

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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By

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This paper is explaining about a development for vertical axis wind Darrieus type turbines for low wind speed and wind speed monitoring in Swiss German University as additional data. Development of wind turbines is performed using OpenFOAM for simulation and Paraview for showing the results from post processing. An implementation on internet of things on monitoring system using Thingspeak™ as host server and data analysis on monitored data to search on the wind scale for daily.

Keywords: VAWT, Turbines, Internet of Things, ESP8266, Darrieus, Vertical Axis Wind Turbines

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DEDICATION

This paper is dedicated for renewable and clean energy to keep our planet green and preventing a larger scale of the global warming and the people out there who wants to make a better place at the future for this Earth. Also I dedicated this project for my family and friends.

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I would also thank to my family to give me a needed hands whenever I am in trouble to make the building process by advising and building some parts needed.

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