## DEPARTMENT OF INFORMATION TECHNOLOGY PSG COLLEGE OF ARTS & SCIENCE

An Autonomous College-Affiliated to Bharathiar University

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Coimbatore-641 014

**CERTIFICATE**

This is to certify that this internship work entitled "**APPLICATIONS OF SOIL MOIST SENSOR IN IoT**" is a bonafide record of work done by **Vaishnavidevi K S (22BIT061)** in partial fulfillment of the requirement for the award of Degree of **Bachelor of Science in Information Technology** of Bharathiar University.

**Faculty Guide Head of the Department**

Submitted for Viva-Voce Examination held on\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Internal Examiner External Examiner**

**i**

**DECLARATION**

I **Vaishnavidevi K S (22BIT061)** hereby declare that this internship work entitled **"APPLICATIONS OF SOIL MOIST SENSOR IN IoT"** is submitted to PSG College of Arts & Science (Autonomous), Coimbatore in partial fulfilment for the award of Bachelor of Science in Information Technology, is a record of original work done by me under the supervision and guidance of **Dr P.Prabhakaran MSc(CT), MCA, M.Phil., MBA, MA(Yoga), PFDCE ,Ph.D.,** Assistant Professor, Department of Information Technology, PSG College of Arts & Science, Coimbatore.

This internship work has not been submitted by me for the award of any other Degree/ Diploma/ Associate ship/Fellowship or any other similar degree to any other university.

PLACE : Coimbatore **Vaishnavidevi K S**

DATE : **22BIT061**

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**ACKNOWLEDGEMENT**

My venture stands imperfect without dedicating my gratitude to a few people who have contributed a lot towards the victorious completion for my internship work.

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I deeply offer my sincere thanks to our **Dr. Brindha D. Principal, MSc MPhil PhD MA (Yoga),** for her valuable advice and genuine concern for our students.

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I kindly and sincerely thank **Dr B. Rajdeepa MCA MPhil PhD Head & Associate Professor of the Department of Information Technology** for her whole hearted help to complete this internship successfully by giving valuable suggestions.

I convey my heartiest and passionate sense of thankfulness to my internship Work guide**, Dr P. Prabhakaran MSc (CT), MCA, M.Phil., MBA, MA(Yoga), PFDCE, Ph.D., Assistant Professor,** **Department of Information Technology** for his timely suggestion which has enabled me to complete the internship successfully.

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**Signature of the Guide Signature of the HOD**

Dr. P.Prabhakaran Dr. B. Rajdeepa

Assistant Professor Associate Professor and Head

Department of Information Technology Department of Information Technology

PSG College of Arts & Science PSG College of Arts & Science

Coimbatore -14 Coimbatore -14

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**SYNOPSIS**

During the internship in TwirlTact Technology solutions, acquired both theoretical and practical concepts of IoT. The Internet of Things (IoT) involves a vast network of interconnected sensors that collect, transmit, and analyze data to enable smart systems and processes. Connectivity is a fundamental aspect of IoT, enabling these sensors to communicate effectively across diverse environments.

The aim of project is to develop the “APPLICATIONS OF SOIL MOIST SENSORS IN IoT” by using python programming as an interface and sensor as an input devices and display devices for output. The purpose of this application is to monitor soil condition and crop health for optimizing irrigation.

This abstract discusses the various connectivity technologies employed in IoT. Each technology offers distinct advantages in terms of range, power consumption, and data throughput, tailored to specific use cases such as smart homes, industrial automation, and environmental monitoring.

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