**VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**AN AUTONOMOUS INSTITUTE**

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Bachupally, Hyderabad – 500090

Telangana, India.

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**SEVEN HABITS OF HIGHLY EFFECTIVE PEOPLE**

1. Be Proactive.
2. Begin with the end in mind.
3. Put first things first.
4. Think Win-Win.
5. First Understand, then be understood.
6. Synergies.
7. Sharpen Your Saw.

We have followed the above 7 steps during the course of our project work

**Kuncham Prashanth 20071A04N3**

**Sunkari Sai Deekshith 20071A04Q0**

**Chirraboina Shiva 20071A04K2**

**Smart Drain Management Using Internet Of Things**

**MAJOR PROJECT WORK SUBMITTED IN PARTIAL FULFILLMENT OF THE**

**REQUIREMENT FOR THE AWARD OF THE DEGREE OF**

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

**Submitted by**

**Kuncham Prashanth (20071A04N3)**

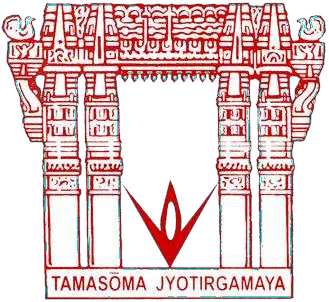
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**UNDER THE GUIDANCE OF**

**Mr. C KAUSHIK**

**Assistant Professor**



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**2023-24**

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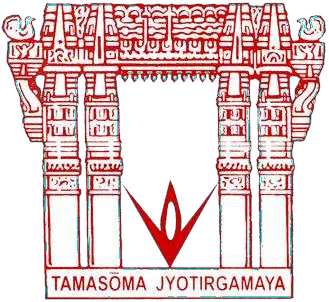
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**CERTIFICATE**

This is to certify that the industry oriented major project report entitled **“Smart Drain Management Using Internet Of Things”** being submitted by **Kuncham Prashanth (20071A04N3), Sunkari Sai Deekshith (20071A04Q0), Chirraboina Shiva (20071A04K2)** in partial fulfillment of the degree of Bachelor of Technology in Electronics and Communication Engineering during the academic year 2023 – 2024.

Certified further, to the best of our knowledge, the work reported here is not a part of any other project on the basis of which a degree or an award has been given on an earlier occasion to any other candidate. The result has been verified and found to be satisfactory.

**SUPERVISOR** **HEAD OF THE DEPARTMENT**

**Mr. C. KAUSHIK** **Dr. S. RAJENDRA PRASAD**

**Assistant Professor Professor & Head**

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**Hyderabad Hyderabad**

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**DECLARATION**

We do declare that the project report entitled **“Smart Drain Management Using Internet Of Things”** submitted to the department of Electronics and Communication Engineering (ECE), Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Hyderabad, in partial fulfillment of the requirement for the award of the degree of **BACHELOR OF TECHNOLOGY** in Electronics and Communication Engineering is the bonafide record of the project report presented under the Supervision of **Mr. C KAUSHIK**, Assistant Professor, VNRVJIET.

Also, we declare that the matter embodied in this project report has not been submitted by me in full or in any part there for the award of any degree/diploma of any other institution or university previously.

**PLACE**: Hyderabad  **KUNCHAM PRASHANTH**

**SUNKARI SAI DEEKSHITH**

**CHIRRABOINA SHIVA**

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**KUNCHAM PRASHANTH**

**SUNKARI SAI DEEKSHITH**

**CHIRRABOINA SHIVA**

**ABSTRACT**

The proposed innovative solutions aim to tackle the challenges encountered by municipal workers during periods of heavy rainfall, thereby enhancing the municipality's control room's ability to monitor drainage situations effectively. One key innovation involves the introduction of an anti-clogging drain system, complemented by Block Detection sensors, which promises to revolutionize rainwater management practices.The anti-clogging system works by ensuring continuous flow even during intense rainfall events. It achieves this by capturing debris using recyclable cloth bags, thereby preventing blockages and maintaining smooth water flow. Meanwhile, the Block Detection sensors employ a cost-effective Plastic Flap mechanism connected to a potentiometer. This setup allows the sensors to swiftly identify and signal any blockages within drainage pipes, enabling timely intervention to prevent potential flooding issues. The data collected from these sensors serves as the backbone of the Drainage Grid monitoring system, providing comprehensive oversight of the entire drainage network .There is 6 junctions in the user interface we kept 6 sensors at the each junction, from the each junction we will get a data from the sensors and transmits the data to the ESP32 which is an server that takes the data and store in the JSON(JavaScript object Notation) file . This browser will take the JSON File data and which will be displayed.

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