VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

# PROJECT REPORT ON

# "IoT BASED WATER UTILITY MONITORING SYSTEM"

**Submitted in partial fulfillment of the requirements for the award of the degree**

**BACHELOR OF ENGINEERING**
**IN**
**ELECTRONICS & COMMUNICATION ENGINEERING**

**Submitted By**


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**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY**

**MOODBIDRI – 574 225.**


**2017-2018**

# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

**MOODBIDRI – 574 225**

(Affiliated to VTU, BELAGAVI)

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

# CERTIFICATE

Certified that the project work entitled "**IOT BASED WATER UTILITY MONITORING SYSTEM**" is a bonafide work carried out by

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in partial fulfillment for the award of BACHELOR of ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2017–2018. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering degree.

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# ABSTRACT

Water quality is observed only at the municipal water tanks which are located zone wise and hence water quality is not been checked at end points where chances of water contamination is present due to rust in the pipeline, hole in the pipeline and some other reasons. Even if water flow is checked at end points, it is time consuming, labor intensive and all end points are not going to cover. Hence, there is need of smart water distribution system with continuous water quality flow check.

Water is an important resource for all the livings on the earth, for life and its existence. Ensure the safe supply of drinking water it should be monitored in real time IoT (Internet of Things) based water utility monitoring has been proposed. The primary concept of real-time IoT based water resources information system is to provide comprehensive and accurate information. The need of water requirement, its distribution and quality check, a water flow is monitored through web interface based on water flow sensor value to ensure equal and adequate water distribution to each connection (end point). Improve water management systems, especially by exploiting the emerging technologies this approach will be more helpful to the utilities operators. The Internet of Things could prove to be one of the most important methods for developing more utility-proper systems and for making the consumption of water resources more efficient.