

Certificate of Industrial Project

MUNICIPAL CORPORATION OF GREATER MUMBAI


AC M/W/ 09 / 1146 /AE(M) dt. 27.3.18

INDUSTRY PROJECT

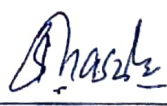
The office of the,
Asstt. Commissioner (M/West Ward),
'M' Ward Office Building, 1st Floor,
Sharadbhau Acharya Marg,
Chembur (East), Mumbai – 400 071.

This is to certify that the students namely **shri. Neeraj Premani, shri Nitin Pandey, shri Shripad Laddha & shri Abhijeet Bhattacharya**, BE Final Year, Computer Engineering, VESIT are developing a project titled "Identification, Analysis and Prediction of urban -waterlogging areas" under the guidance of Dr.(Mrs.) Gresha S. Bhatia, Deputy HOD, VESIT and Mr. Shrikant Rade, Sub Engineer (Maint.) & Mr. Bhaskar Kasgikar, Asstt. Engineer (Maint.) of MCGM. The said is scheduled to be completed before June 2018.

This project entails providing important information and data records. The data provided from us has to be utilized for academic purposes only.



Mr. Shrikant Rade
Sub Engineer (Maint.)
MCGM



Mr. Bhaskar Kasgikar
Asstt. Engineer (Maint.)
MCGM

MUNICIPAL CORPORATION OF GREATER MUMBAI

AC M/W/ 005 / 1005 / Maint.

Date: - 27.03.2018

Project Completion Certificate

Subject: Successful completion of the project "Identification, Analysis and Prediction of Urban Waterlogged Areas" under the guidance of Dr. Mrs. Gresha S Bhatia and Mr. Shrikant Rade from MCGM.

This is to certify that final year students of Computer Engineering Department, VESIT : Mr. Abhijeet Bhattacharya, Mr. Shripad Laddha, Mr. Nitin Pandey and Mr. Neeraj Premani under the guidance of Dr. Mrs. Gresha S Bhatia and Mr. Shrikant Rade have successfully completed the project titled "Identification, Analysis and Prediction of Urban Waterlogged Areas" in M/West ward of MCGM, with all the required documents and reports, during the period from 20th August 2017 to 20th March 2018.

1. It has been observed that the project is of social importance and fulfills the need of the hour.
2. This project if given a chance to be implemented by the organization would enable the detection of water logging on a near real time basis.
3. The seamless integration of the project into the existing system would aid in an efficient and effective mitigation process.
4. This project would further ensure the smooth conduction of the human resources through the notification tab designed especially for the management of the organization.
5. Reports generated by the project can be used as a input for big data analytics and improvise the entire water logging system handling machinery.

The efforts taken by the students are highly commendable and they have left no stone unturned to complete the project on time and as per the requirements furnished to them

This project with MCGM entailed dealing with important and sensitive information, records and such other matters of the MCGM. The project would be utilized for academic purpose only.


Asst. Engineer (Maintenance) M/West

Date :27.03.2018.

Place :Chembur (E).

**VIVEKANAND EDUCATION SOCIETY'S
INSTITUTE OF TECHNOLOGY
Department of Computer Engineering**



Certificate

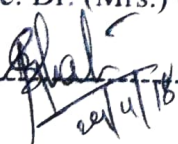
This is to certify that **Abhijeet Bhattacharya , Shripad Laddha , Nitin Pandey , Neeraj Premani** of Fourth Year Computer Engineering studying under the University of Mumbai have satisfactorily completed the project on “**Identification , Analysis and Prediction of Urban Waterlogged areas**” as a part of their coursework of PROJECT-II for Semester-VIII under the guidance of their mentor **Dr. (Mrs.) Gresha S. Bhatia** in the year 2017-2018 .

This project report entitled **Identification , Analysis and Prediction of Urban Waterlogged areas** by **Abhijeet Bhattacharya, Shripad Laddha, Nitin Pandey, Neeraj Premani** is approved for the degree of **Computer Engineering**.

Programme Outcomes	Grade
PO1,PO2,PO3,PO4,PO5,PO6,PO7, PO8, PO9, PO10, PO11, PO12 PSO1, PSO2	D

Date: 24/4/18

Project Guide: Dr. (Mrs.) Gresha S. Bhatia


24/4/18

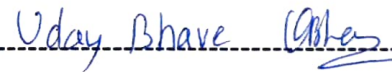
Project Report Approval For B. E (Computer Engineering)

This project report entitled *Identification , Analysis and Prediction of Urban Waterlogged areas* by *Abhijeet Bhattacharya , Shripad Laddha , Nitin Pandey , Neeraj Premani* is approved for the degree of *Computer Engineering*.

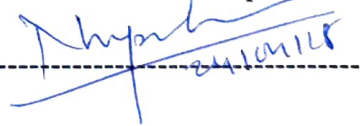
Internal Examiner


24/6/18

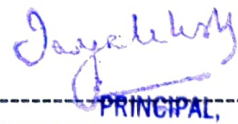
External Examiner


Uday Bhawe

Head of the Department


24/6/18





Principal

PRINCIPAL,
VIVEKANAND EDUCATION SOCIETY'S
INSTITUTE OF TECHNOLOGY
HASHU ADVANI MEMORIAL COMPLEX,
COLLECTOR'S COLONY, CHEMBUR,
MUMBAI-400 074, INDIA.

Date: 24/6/18

Place: VESIT, CHEMBUR

Abstract

Waterlogging is one of the major misfortune faced by human beings, It mainly occurs in rainy season due to excess of rainfall in lowline areas or closed areas. Normal approaches are not enough to prevent it and also we lag any real time system to identify and cure the waterlogging. In the last rainy seasons there were increment in the occasions of the waterlogging in the mumbai region which had severe effects on the working of the region leading to jamming of highways and various sanitary problems.

The proposed project is based on the real time tracking of the waterlogged areas, which will not only keep the authorities updated about the current and future status of the waterlogging but also native people can also contribute in order to report the waterlogging in the local area via FB Chat Bot.

In the proposed system in order to satisfy the real time identification of the waterlogging; ultrasonic sensors have be used, which will be installed at the particular height on street lights which will give the current data to server for the identification and analysis. In order to be ready for the waterlogging, prediction module is there which will give the short term, medium term and high term prediction of the particular area. There will be final report which will give the visualization of the sensors data, FB reported areas in order to understand the results easily.

In order to notify the officials about the current waterlogging message notification will be provided to the assigned officer of that area. The Notification module will also help the officers to give the direction to its subordinate.