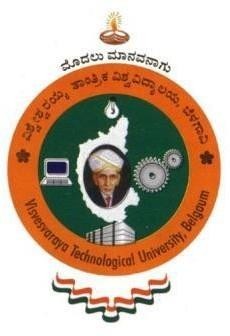
# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

### Jnana Sangama, Belagavi-560018



**A PROJECT PHASE-II REPORT**

**ON**

### “MARITIME ACCIDENT PREDICTION SYSTEM USING MACHINE LEARNING”

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**Submitted in the partial fulfillment of the requirements for the Award of Degree BACHELOR OF ENGINEERING**

**IN**

**INFORMATION SCIENCE AND ENGINEERING**

**Under the guidance of:**

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### DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

**R R INSTITUTE OF TECHNOLOGY**

**Accredited by NAAC with ‘B+’** Chikkabanavara, Bangalore-560090 Academic year 2022-23

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# CERTIFICATE

Certified that the project work entitled **“MARITIME ACCIDENT PREDICTION SYSTEM USING MACHINE LEARNING”** carried out by **DINESH DHANUK** bearing **USN: 1RI19IS018**, **ASHWIN POUDEL** bearing **USN: 1RI19IS006**, **BIKRAM GUPTA** bearing **USN: 1RI19IS011**, **SAMIR SINGH** bearing **USN: 1RI19IS038**, a bonafide student of R R Institute of Technology in partial fulfillment for the award of Bachelor of Engineering in **Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal/External Assessment have been incorporated in the report submitted in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

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**Name of the Examiners Signature with date**

1. ……………………….

2. ……………………….

**DECLARATION**

We **DINESH DHANUK USN: 1RI19IS018**, **ASHWIN POUDEL USN: 1RI19IS006**, **BIKRAM GUPTA USN: 1RI19IS011**, **SAMIR SINGH USN: 1RI19IS038** students of 8th Semester in Information Science & Engineering, R R Institute of Technology, Chikkabanavara, Bengaluru, declare that the project entitled **“MARITIME ACCIDENT PREDICTION SYSTEM USING MACHINE LEARNING”** has been carried out by us and submitted in partial fulfillment of the course requirements for the award of degree in **Bachelor of Engineering in Information Science & Engineering of Visvesvaraya Technological University, Belgaum,** during the academic year **2022-23.** The matter embodied in this report has not been submitted to any other university or institution for the award of any other degree or diploma.

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**ABSTRACT**

Maritime transportation plays a crucial role in the global economy, but it also poses significant risks to human life, the environment, and the economy in the event of an accident. To reduce the likelihood of maritime accidents, a maritime accident prediction system has been developed. This system uses machine learning algorithms to analyze historical data and predict the likelihood of an accident occurring in each location. In this paper, we describe the development of a decision tree-based maritime accident prediction system. We collected historical data related to maritime accidents and vessel characteristics, processed the data to remove outliers and inconsistencies, and tested multiple machine learning algorithms to determine the most accurate algorithm for predicting maritime accidents. After testing multiple algorithms, a decision tree algorithm was selected as the best algorithm for the task. The decision tree algorithm was trained on processed data to predict the likelihood of an accident occurring in each location. We implemented the maritime accident prediction system as a web-based application, which allows users to input their location and receive a prediction of the likelihood of an accident occurring in that location. The system also provides users with information on the factors that contribute to the likelihood of an accident occurring in a particular location. Our results show that the decision tree based maritime accident prediction system can accurately predict the likelihood of an accident occurring in each location and can provide valuable information to maritime operators and emergency responders.

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