

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
“JNANA SANGAMA”, BELAGAVI-590018



An
Internship Report On

“Bank Marketing Prediction Model Using ML ”

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF DEGREE OF

BACHELOR OF ENGINEERING IN
INFORMATION SCIENCE AND ENGINEERING

SUBMITTED BY

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Under the Guidance of

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DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

SJB INSTITUTE OF TECHNOLOGY

**BGS HEALTH AND EDUCATION CITY, KENGERI,
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2023 - 2024



||JAI SRI GURUDEV||
Sri Adichunchanagiri Shikshana Trust ®

SJB INSTITUTE OF TECHNOLOGY

BGS Health & Education City, Dr. Vishnuvardhan Road, Kengeri, Bengaluru -560060

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2(f) and 12(B) recognized by UGC, New Delhi.

Department of Information Science & Engineering



CERTIFICATE

Certified that the Internship entitled “ **Bank Marketing Prediction Model Using ML**” carried out by **Mr. Nishant Manjunath Hegde** bearing 1JB21IS073 is a bonafide student of **SJB INSTITUTE OF TECHNOLOGY** in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **INFORMATION SCIENCE AND ENGINEERING** of the **Visvesvaraya Technological University, Belagavi** during the academic year **2023-24**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report and deposited in the departmental library. The internship report has been approved as it satisfies the academic requirements in respect of Internship prescribed for the said degree.

Signature of Guide

Mrs. Pavithra
Assistant Professor
Dept. of ISE, SJBIT

Signature of HOD

Dr. Shashidhara H R
Professor & Head
Dept. of ISE, SJBIT

Signature of Principal

Dr. K V Mahendra Prashanth
Principal SJBIT,
Bengaluru

INTERNAL VIVA

Name of the Examiners

1.....

2.....

Signature with Date

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ACKNOWLEDGEMENT

I would like to express our profound grateful to **His Divine Soul Jagadguru Padmabhushan Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji** and His Holiness **Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Swamiji** for providing me an opportunity to be a part of this esteemed institution.

I would also like to express our profound thanks to **Revered Sri Sri Dr. Prakashnath Swamiji**, Managing Director, SJB Institute of Technology, for his continuous support in providing amenities to carry out this Internship in this admired institution.

I express our gratitude to **Dr. K V Mahendra Prashanth**, Principal, SJB Institute of Technology, for providing me excellent facilities and academic ambience; which helped me in satisfactory completion of Internship work.

I extend our sincere thanks to **Dr. Babu N V**, Professor, Dean Academics; for providing us invaluable support throughout the period of my internship work.

I extend our sincere thanks to **Dr. Shashidhara H R**, Professor & Head, Dept.of Information Science and Engineering; for providing us invaluable support throughout the period of my internship work.

I wish to express our heartfelt gratitude to my guide, **Mrs. Pavithra**, for **her** valuable guidance, suggestions and cheerful encouragement during the entire period of my internship work.

I express my truthful thanks to **Dr. Pavitra Bai S and Mrs. Chaithra G V**, Internship coordinators, Dept.of Information Science and Engineering for their valuable support.

Finally, I take this opportunity to extend my earnest gratitude and respect to our parents, teaching & technical staff of the department, the library staff and all my friends, who have directly or indirectly supported me during the period of my internship work.

Regards,

NISHANT MANJUNATH HEGDE

[1JB21IS073]

DECLARATION

I hereby declare that the entire work embodied in this Internship report has been carried out under the supervision of **Mrs. Pavithra, Assistant Professor** in partial fulfillment for the award of “BACHELOR OF ENGINEERING” in INFORMATION SCIENCE AND ENGINEERING as prescribed by VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the academic year 2022-23.

Nishant Manjunath Hegde [1JB21IS073]

INTERNSHIP CERTIFICATE



Aqmenz Automation
Private Limited

CIN: U74999KA2018PTC117612



CERTIFICATE OF INTERNSHIP

THIS CERTIFICATE IS PROUDLY PRESENTED TO
NISHANT MANJUNATH HEGDE

1JB21IS073

Has successfully completed **Internship** at **Aqmenz Automation Pvt. Ltd.** on

Innovation Project on Python & Machine Learning

for a period of one month from 25/10/2023 to 24/11/2023

CERTIFICATE ISSUE NO: IN / **17401** / FY2023

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ABSTRACT

The document provides information about Aqmenz Automation Pvt. Ltd., its vision and mission, organizational structure, services offered, and details about the number of employees. It also discusses the features of the Scikit-learn library, including supervised and unsupervised learning algorithms, clustering, cross-validation, dimensionality reduction, ensemble methods, feature extraction, lambda functions, and the reduce function in Python.

Additionally, it discusses a bank marketing prediction project that utilizes machine learning techniques to forecast whether a client would sign up for a term deposit. It emphasizes the importance of understanding client behavior and preferences for marketing banking products and services. The project aims to build a precise and effective model to calculate a customer's chance of subscribing to a term deposit, enabling banks to better target their marketing initiatives and optimize their strategies. The document also covers the methodology, data collection, data cleaning and preprocessing, model building, model selection, and evaluation. It concludes with the result, stating the accuracy of the Decision Tree model as 75.25%.

