#### TELECOM CUSTOMER CHURN PREDICTION

#### A MAJOR PROJECT REPORT

Submitted by

#### H.POOJA 17RH1A0575

Under the Esteemed Guidance of
Mrs. Vunnam Narmada
Assistant Professor of CSE

in partial fulfillment of the Academic Requirements for the Degree of

#### **BACHELOR OF TECHNOLOGY**



#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

(Autonomous Institution-UGC, Govt. of India)

Accredited by NBA & NAAC with 'A' Grade, UGC, Govt. of India

NIRF Indian Ranking, Accepted by MHRD, Govt. of India

Band A (6<sup>th</sup> to 25<sup>th</sup>) National Ranking by ARIIA, MHRD, Govt. of India

Approved by AICTE, ISO 9001:2015 Certified Institution

AAAA+ Rated by Digital Learning Magazine, AAA+ Rated by Careers 360Magazine 3<sup>rd</sup> Rank CSR,

Platinum Rated by AICTE-CII Survey, 141 National Ranking by India Today Magazine

National Ranking-Top 100 Rank band by Outlook Magazine, National Ranking-Top 100 Rank band by Times NewsMagazine

2020-2021

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2020-2021

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### **CERTIFICATE**

This is to certify that the Major Project work entitled "TELECOM CUSTOMER CHURN PREDICTION" is carried out by H.Pooja (17RH1A0575) in partial fulfillment for the award of BACHELOR OF TECHNOLOGY in Computer Science and Engineering, Jawaharlal Nehru Technological University, Hyderabad during the academic year 2020-2021.

**Supervisor's Signature** 

Mrs. Vunnam Narmada

**Assistant Professor** 

**Head of the Department** 

Dr. C.V.P.R.PRASAD

**Professor** 

**External Examiner** 



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING DECLARATION

We hereby declare that the Major Project entitled "TELECOM CUSTOMER CHURN PREDICTION" submitted to Malla Reddy Engineering College for Women, affiliated to Jawaharlal Nehru Technological University, Hyderabad (JNTUH) for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a result of original research work done by us.

It is declared that the technical Major Project report has not been previously submitted to any University or Institute for the award of Degree.

Being submitted by H.POOJA (17RH1A0575)

#### **ACKNOWLEDGEMENT**

We feel ourselves honored and privileged to place our warm salutation to our college **Malla Reddy Engineering College for Women** and Department of **Computer Science and Engineering** which gave us the opportunity to have expertise in engineering and profound technical knowledge.

We would like to deeply thank our Honorable Minister of Telangana State **Sri.Ch. Malla Reddy Garu,** founder chairman MRGI, the largest cluster of institutions in the state of Telangana for providing us with all the resources in the college to make our project success.

We wish to convey gratitude to our **Principal Dr. Y. Madhavee Latha**, for providing us with the environment and mean to enrich our skills and motivating us in our endeavor and helping us to realize our full potential.

We express our sincere gratitude to **Dr. C.V.P.R. Prasad**, **Head of the Department** of Computer Science and Engineering for inspiring us to take up a project on this subject and successfully guiding us towards its completion.

We would also like to thank our Project coordinator **Mrs.V.Naramada**, for his kind encouragement and overall guidance in viewing this program a good asset with profound gratitude.

We would like to thank our internal guide **Mrs.V.Narmada**, and all the Faculty members for their valuable guidance and encouragement towards the completion of our project work.

With Regards and Gratitude

H.POOJA (17RH1A0575)

#### **ABSTRACT**

Customer churn has become highly important for companies because of increasing competition among companies, increased importance of marketing strategies and conscious behaviour of customers in the recent years. Customers can easily trend toward alternative services. Companies must develop various strategies to prevent these possible trends, depending on the services they provide. During the estimation of possible churns, data from the previous churns might be used. An efficient churn predictive model benefits companies in many ways. Early identification of customers likely to leave may help to build cost effective ways in marketing strategies. Customer retention campaigns might be limited to selected customers but it should cover most of the customer. Incorrect predictions could result in a company losing profits because of the discounts offered to continuous subscribers. Telecommunication industry always suffers from a very high churn rates when one industry offers a better plan than the previous there is a high possibility of the customer churning from the present due to a better plan in such a scenario it is very difficult to avoid losses but through predictionwe can keep it to a minimal level. A machine learning model is built and this helps to identity the probable churn customers and then makes the necessary business decisions.

### **INDEX**

TOPICS	Page No.
TITLE PAGE	I
CERTIFICATE	Ii
DECLARATION	iii
ACKNOWLEDGEMENT	Iv
ABSTRACT	V
CHAPTER – 1 INTRODUCTION	1 - 4
1.1 Introduction	1
1.2 Existing System	2
1.2.1 Disadvantages of Existing System	3
1.3 Proposed System	3
1.3.1 Advantages of Proposed System	3
CHAPTER – 2 LITERATURE SURVEY	5 - 9
2.1 Literature Review	5
2.2 Impact of Customer Churn in Telecom Industry	5
2.3 Feasibility Study	7
2.3.1 Technical Feasibility	7
2.3.2 Economic Feasibility	8
2.3.3 Operational Feasibility	9
CHAPTER – 3 SOFTWARE REQUIREMENTS ANALYSIS	10 - 12
3.1 Definition of Problem	10
3.2 Algorithms	12
CHAPTER – 4 SOFTWARE DESIGN	13 - 18
4.1Data Flow Diagram	13
4.2 UML Diagram	15
4.3 Deployment Diagram	17
4.4 E – R Diagram	18
CHAPTER – 5 SOFTWARE AND HARDWARE REQUREMENTS	19 - 21
5.1 Requirement Specification	19

CHAPTER – 6 SOFTWARE IMPLEMENTATION	22 – 50
CHAPTER – 7 TESTING	51 - 54
CHAPTER – 8 OUTPUT SCREENS	55 - 58
CHAPTER – 9 CONCLUSION	59
CHAPTER – 10 FURTHER ENHANCEMENTS	60
CHAPTER – 11 REFERENCES	61 - 62

#### LIST OF FIGURES

S No.	Figure	Figure Name	Page no.
	no.		
1	1.1	Architecture of the Proposed System	4
2	4.1	Data Flow Diagram	14
3	4.2	Project Flow Structure	15
4	4.3	Use Case Diagram	16
5	4.4	Deployment Model	17
6	4.5	E - R Diagram	18
7	6.1	HeatMap	27
8	6.2	Pair Plot Diagram	29
9	6.3	Confusion Matrix of Prediction	39
10	6.4	Roc-Auc Curve	40
11	7.1	Anaconda Prompt Screen	52
12	7.2	Test - 1	53
13	7.3	Test - 2	53
14	7.4	Test - 3	54
15	7.5	Test - 3.1	54
16	8.1	Output Screen - 1	55
17	8.2	Output Screen - 2	56
18	8.3	Output Screen - 3	57
19	8.4	Output Screen - 4	58