

TABLE OF CONTENTS

S.NO	CONTENTS	PAGE.NO
I	Abstract	i
II	List of Figures	ii
III	List of Abbreviations	iii
1	INTRODUCTION	1
2	SYSTEM STUDY	2
	2.1 Feasibility Study	2
	2.2 Economical Feasibility	2
	2.3 Technical Feasibility	2
	2.4 Social Feasibility	3
3	LITERATURE SURVEY	4
	3.1 The Use of Predictive Analytics Technology to Detect Credit Card Fraud in Canada.	4
	3.2 BLAST-SSAHA Hybridization for Credit Card Fraud Detection	4
	3.3 Research on Credit Card Fraud Detection Model Based on Distance Sum	4
	3.4 Fraudulent Detection in Credit Card System Using SVM & Decision Tree	5
	3.5 Supervised Machine (SVM) Learning for Credit Card Fraud Detection	5
4	RESEARCH METHODOLOGY	6
	4.1 Existing System	6
	4.1.1 Disadvantages	6
	4.2 Proposed System	7
	4.2.1 Advantages	7
5	SYSTEM REQUIREMENTS	8
	5.1 Hardware System Configuration	8
	5.2 Software System Configuration	8
	5.3 Functional Requirements	9
	5.4 Non-Functional Requirements	9
6	SYSTEM ARCHITECTURE	10

	4.1 System Architecture	10
7	MODULES	11
8	UML DIAGRAMS	12
	8.1 Data Flow Diagram	12
	8.2 Use Case Diagram	13
	8.3 Class Diagram	14
	8.4 Sequence Diagram	14
	8.5 Activity Diagram	15
	8.6 Collaboration Diagram	16
9	SYSTEM TESTING	17
	9.1 Testing Methodologies	17
	9.1.1 Unit Testing	17
	9.1.2 Integration Testing	17
	9.1.3 User Acceptance Testing	18
	9.1.4 Output Testing	19
	9.1.5 Validation Checking	19
	9.1.6 System Testing	21
10	ALGORITHMS	22
	10.1 XGBoost	22
	10.2 Random Forest	22
11	PYTHON	24
	11.1 Introduction	24
	11.1.1 History of Python	24
	11.2 List	25
	11.3 Tuples	27
	11.4 Dictionary	29
	11.5 Defining a Function	30
	11.6 Scope of Variables	31
	11.7 How to Install Python on Windows and Mac	33
12	SOURCE CODE	41
13	OUTPUT SCREENS	47
	13.1 Home page	47
	13.2 Dataset Upload	47
	13.3 Dataset Details	48
	13.4 Run Random Forest Algorithm	48
	13.5 Random Forest Accuracy	49
	13.6 Xgboost Accuracy	49

	13.7 Detect Fraud from Test Data	50
	13.8 Clean and Fraud Transaction Detection Graph	50
14	CONCLUSION	51
15	FUTURE ENHANCEMENT	52
	REFERENCES	53