



PROJECT REPORT

IMPLEMENTATION OF LINEAR REGRESSION ALGORITHM FOR DATA PREDICTION

LAURENSIUS ADE PUTRA UTAMA
15.K1.0055

Faculty of Computer Science
Soegijapranata Catholic University
2020

HALAMAN PENGESAHAN



Judul Tugas Akhir : implementation of linear regression algorithm for data prediction

Diajukan oleh : Laurensius Ade Putra Utama

NIM : 15.K1.0055

Tanggal disetujui : 30 Juli 2022

Telah setujui oleh

Pembimbing : Hironimus Leong S.Kom., M.Kom.

Pengaji 1 : Hironimus Leong S.Kom., M.Kom.

Pengaji 2 : Y.b. Dwi Setianto S.T., M.Cs.

Pengaji 3 : R. Setiawan Aji Nugroho S.T., MCompIT., Ph.D

Pengaji 4 : Yonathan Purbo Santosa S.Kom., M.Sc

Pengaji 5 : Rosita Herawati S.T., M.I.T.

Pengaji 6 : Yulianto Tejo Putranto S.T., M.T.

Ketua Program Studi : Rosita Herawati S.T., M.I.T.

Dekan : Dr. Bernardinus Harnadi S.T., M.T.

Halaman ini merupakan halaman yang sah dan dapat diverifikasi melalui alamat di bawah ini.

sintak.unika.ac.id/skripsi/verifikasi/?id=15.K1.0055

DECLARATION OF AUTHORSHIP

I, the undersigned:

Name : Laurensius Ade Putra Utama

ID : 15.k1.0055

declare that this work, titled "Implementation of Linear Regression Algorithm for Data Prediction", and the work presented in it is my own. I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at Soegijapranata Catholic University
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
3. Where I have consulted the published work of others, this is always clearly attributed.
4. Where I have quoted from the work of others, the source is always given.
5. Except for such quotations, this work is entirely my own work.
6. I have acknowledged all main sources of help.
7. Where the work is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Semarang, July, 30, 2022



Laurensius Ade Putra Utama

15.K1.0055

HALAMAN PERNYATAAN PUBLIKASI KARYA ILMIAH UNTUK KEPENTINGAN AKADEMIS

Yang bertanda tangan dibawah ini :

Nama : Laurensius Ade Putra Utama
NIM : 15.K1.0055
Program Studi : Teknik Informatika
Fakultas : Ilmu Komputer
Jenis Karya : Laporan Akhir

Menyetujui untuk memberikan kepada Universitas Katolik Soegijapranata Semarang Hak Bebas Royalty Nonekslusif atas karya ilmiah yang berjudul “Implementation of Linear Regression Algorithm for Data Prediction” beserta perangkat yang ada (jika diperlukan). Dengan Hak Bebas Royalty Nonekslusif ini Universitas Katolik Soegijapranata berhak menyimpan, mengalihkan media/formatkan, mengelola dalam bentuk pangkalan data (database), merawat, dan mempublikasikan tugas akhir ini selama tetap mencantumkan nama saya sebagai penulis / pencipta dan sebagai pemilik Hak Cipta.

Demikian pernyataan ini saya buat dengan sebenar - benarnya.

Semarang, 30 July 2022

Laurensius Ade Putra Utama
15.K1.0055

ACKNOWLEDGMENT

Praise God Almighty, for the presence of plenty of mercy and his grace, so that the writer can complete the thesis with the title: "Implementation of Linear Regression Algorithm for Data Prediction". This is to meet one of the conditions and completed studies in order to obtained a Bachelor Degree in Soegijapranata Catholic University.

Appreciation and thanks the author gave to Mr. Hieronimus Leong as a Supervisor I and Mr. Robertus Setiawan Aji Nugroho as Supervisor II which has helped this thesis writing. As well as a thank you to:

Mr. Ferdinand Hindarto as Rector of Soegijapranata Catholic University.

Mr. Robertus Setiawan Aji Nugroho as Dean of the Faculty Computer Science Soegijapranata Catholic University.

Appreciation and thanks to the sincerely beloved Father and a beloved Mother, Noor Nugroho and Yuliana Sulastri, who have put all our love and affection and attention to moral as well as material. My lovely sister, Elizabeth Cinthya Femilia, who always strengthen my spirit. My friends Paulus Praja Credana, Nadya Mutiara Shandy, Poppy Julia, and Team Dranix Esports who always give great support.

The final word the author realized that in the writing of this thesis is still far from perfection. Therefore, the authors invoke suggestions and criticisms which is build for the sake of perfection and may be useful for all of us. Ameen

ABSTRACT (ABSTRACT TITLE)

Regression analysis or test is a study of the relationship between one variable, namely a free variable, with one or more variables to a bound variable. If there is only one free variable, the regression analysis is called simple regression. This simple linear regression analysis is often used in daily needs in various areas of life.

So that, simple linear regression analysis is needed by various users in any field but is constrained by the form of devices or applications that do not support it in simple form because it still relies on complex statistical programs and is still commercial

This study focused on discussing simple linear regression in helping to predict any value in daily needs. This study aims to help users or users in determining the prediction of the value they want in the form of a simple program. This research produced a simple linear regression analysis program that can be used to predict values according to the user's wishes.

Keywords: Regression, Linear, Analysis, etc.

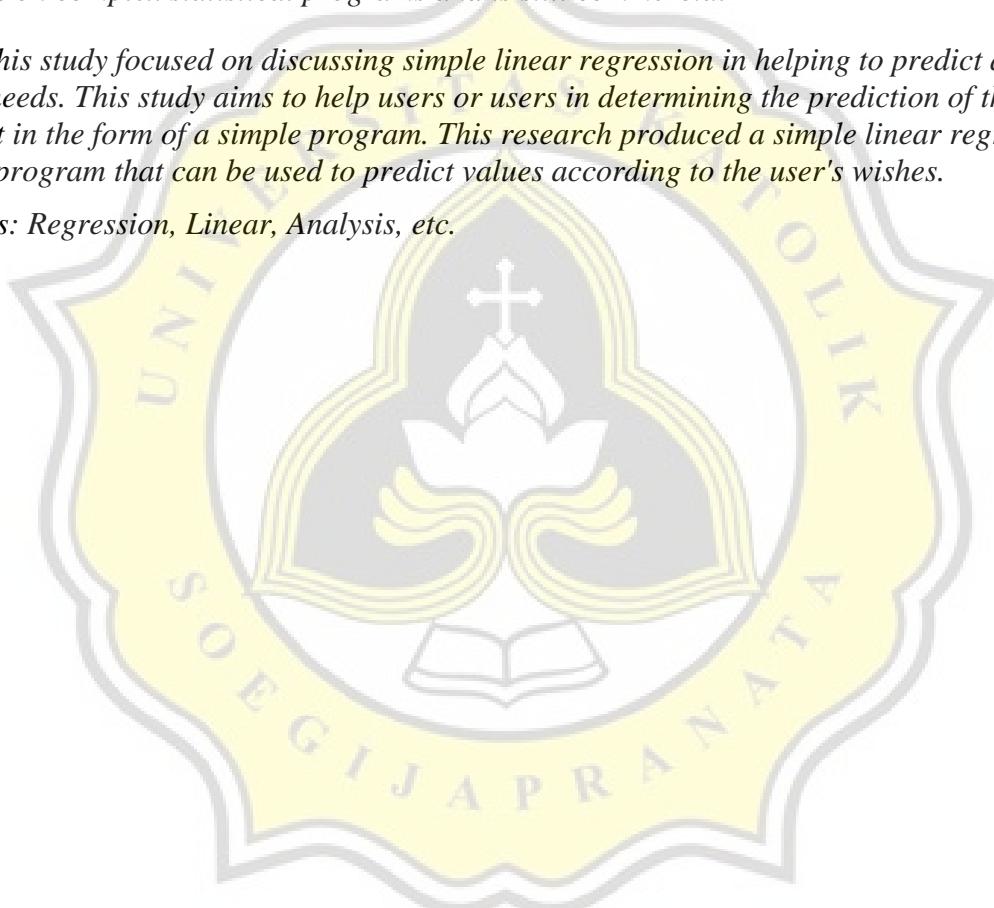


TABLE OF CONTENTS

COVER	i
APPROVAL AND RATIFICATION PAGE (Heading plain)Error! Bookmark not defined.	
DECLARATION OF AUTHORSHIPii	
ACKNOWLEDGMENTiii	
ABSTRACT (Abstract Title)vi	
TABLE OF CONTENTSvii	
LIST OF FIGUREix	
LIST OF TABLEx	
CHAPTER 1Error! Bookmark not defined.Error! Bookmark not defined.	
1.1.Template Error! Bookmark not defined.Error! Bookmark not defined.Error!	
Bookmark not defined.	
Error! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark not defined.	
1.1.2.Writing Error! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark	
not defined.	
1.1.3.Page Error! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark not	
defined.	
1.1.4.Numbering Error! Bookmark not defined.Error! Bookmark not defined.Error!	
Bookmark not defined.	
1.1.5.Numbering Error! Bookmark not defined.Error! Bookmark not defined.Error!	
Bookmark not defined.	
1.2.Contents Error! Bookmark not defined.Error! Bookmark not defined.Error!	
Bookmark not defined.	

CHAPTER 21111

2.1.Background1111 11

2.2.Problem 111111

2.3.Scope1212 12

2.4.Objective1212 12

CHAPTER 31313

CHAPTER 41616

CHAPTER 51919

5.1.Analysis1919 19

5.2.Image Error! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark not defined.

5.3.TableError! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark not defined.

5.4.DesignError! Bookmark not defined.Error! Bookmark not defined. Error! Bookmark not defined.

5.5.FunctionError! Bookmark not defined.Error! Bookmark not defined. Error! Bookmark not defined.

CHAPTER 62121

6.1.Implementation2121 21

6.2.TestingError! Bookmark not defined.Error! Bookmark not defined. Error! Bookmark not defined.

CHAPTER 7Error! Number cannot be represented in specified format.Error! Number cannot be represented in specified format.

REFERENCESError! Number cannot be represented in specified format.

APPENDIXError! Number cannot be represented in specified format.

LIST OF FIGURES

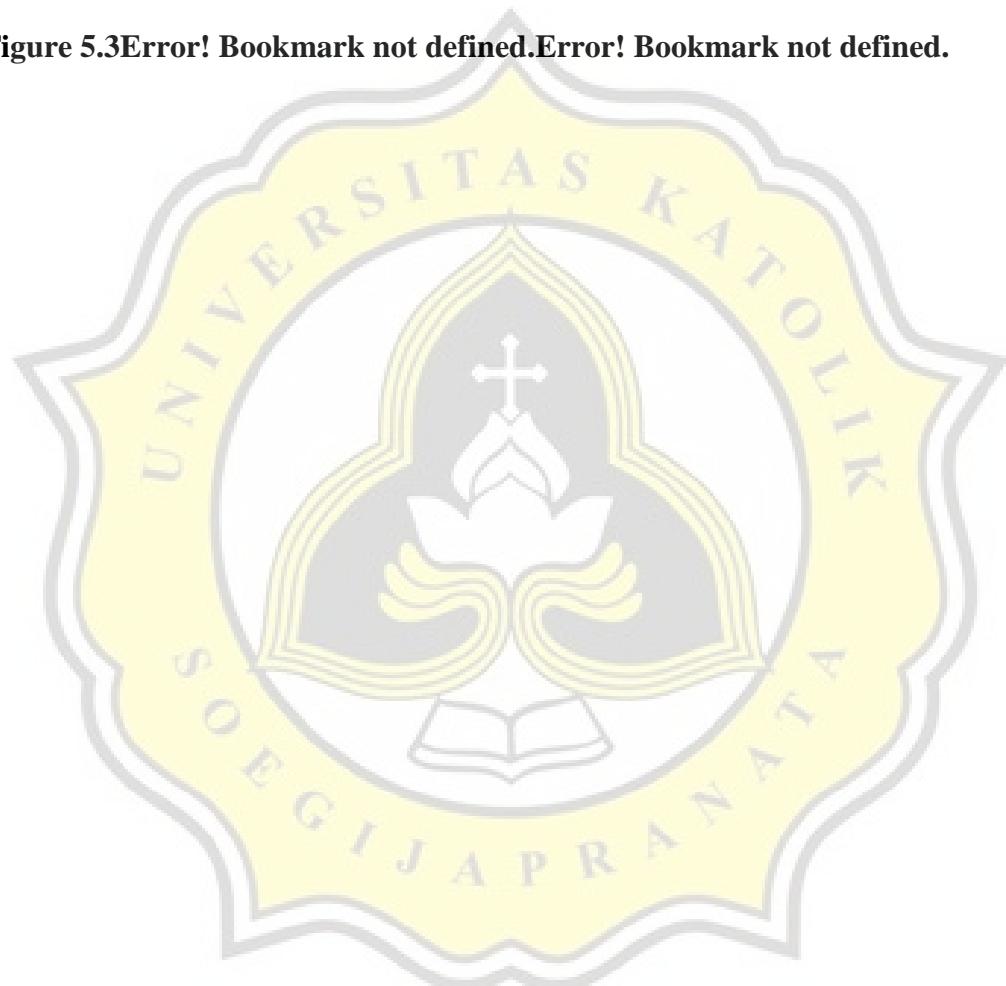
Figure 5.1Error! Bookmark not defined.Error! Bookmark not defined.

Figure 5.2Error! Bookmark not defined.Error! Bookmark not defined.

Figure 5.1Error! Bookmark not defined.Error! Bookmark not defined.

Figure 5.2Error! Bookmark not defined.Error! Bookmark not defined.

Figure 5.3Error! Bookmark not defined.Error! Bookmark not defined.



LIST OF TABLE

Table 5.1. Error! Bookmark not defined.Error! Bookmark not defined.

