

UNIVERSITI TEKNOLOGI MARA

**GENERATION OF ARABIC
ALPHABET BY USING BEZIER
CURVE
P13S23**

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Report submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Science (Hons.)
(Mathematics)

College of Computing Informatics & Mathematics

November 2023

ABSTRACT

The use of Bezier curves to generate Arabic letters marks a significant achievement in the field of Arabic calligraphy and digital typography. Bezier curves, which are famed for their adaptability and precision, offer a unique way to create the complicated and beautiful Arabic letter with graceful fluidity. This method enables for the correct replication of complex and visually rich Arabic characters while allowing different styles and calligraphic traditions. Although Bezier can be used to generate the Arabic character, it is quite difficult to determine whether the most suitable point of degree can be used to generate perfect Arabic character due to their uniqueness in curve. Hence the prime objective of the research is to discover the optimal curves for representing the Arabic alphabet. As for methodology of this study, a degree two up to four are used to determine the best curve for each alphabet chosen which is “Kaf”, “Yaa” and “Nun”. Then, combine the best curve fitting from “Kaf”, “Yaa” and “Nun” the to make the 'KunFayakun' Calligraphy.

ACKNOWLEDGEMENT

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

First of all, for Allah S.W.T. We are grateful to him for giving us the strength to make this project a success. We would like to thank our supervisor Dr. Noorehan Awang and our committee chair for their invaluable patience and feedback. We would not have been able to embark on this journey without the Defense Committee, who generously shared their knowledge and expertise. Additionally, this endeavor would not have been possible without the generous support of our MSP660 lecturer Sir Mohd Azdi bin Maasar.

I would also like to thank my classmates, especially my teammates. What helps them are late-night feedback sessions. Thank you also to the university librarians who influenced and inspired you. Lastly, I won't mention our family, especially my parents. Their faith in us kept our spirits and motivation high throughout the process.

TABLE OF CONTENTS

	Page
SUPERVISOR’S APPROVAL	i
AUTHOR’S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background Of The Study	1
1.2 Problem Statement	2
1.3 Objective	3
1.4 Significance And Benefit of Study	3
1.5 Limitations	4
1.6 Scope of Study	5
1.7 Definitions of Terms	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1 (Computer Aided Geometric Design) CAGD	7
2.2 Curves	8
2.3 Application Bezier Curve	10
2.4 Arabic Alphabet	12
2.5 Bezier Curve	13

2.6	Generate Arabic Alphabet Using Bezier Curve	15
CHAPTER THREE: METHODOLOGY AND IMPLEMENTATION		17
3.1	Research Flowchart	17
3.2	Bezier Curve	18
3.2.1	Calculation of Bezier Curve	18
3.3	Alphabet of The Study	21
3.4	Image of 'Kun Fayakun'	22
CHAPTER FOUR: RESULTS AND DISCUSSIONS		23
4.1	Introduction	23
4.2	Linear Bezier	25
4.3	Quadratic Bezier	26
4.3.1	Generation of "Nun" Quadratic Bezier	27
4.3.2	Generation of "Yaa" Quadratic Bezier	29
4.3.3	Generation of "Kaf" Quadratic Bezier	31
4.4	Cubic Bezier	33
4.4.1	Generation of "Nun" Cubic Bezier	34
4.4.2	Generation of "Yaa" Cubic Bezier	36
4.4.3	Generation of "Kaf" Cubic Bezier	38
4.5	Quartic Bezier	40
4.5.1	Generation of "Nun" Quartic Bezier	41
4.5.2	Generation of "Yaa" Quartic Bezier	43
4.5.3	Generation of "Kaf" Quartic Bezier	45
4.6	Combination of Alphabet in Each Degree	47
4.7	Comparison of Alphabet in Each Degree	49
4.8	The Comparison by Using Computation Time	51
4.9	Final Result	52
4.10	Combination of Arabic Alphabet to produce "KunFayakun"	53
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS		55
REFERENCES		58