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Mathematical Modeling of the oneness of Allah Word

ABSTRACT

The past few years have witnessed great progress in scientific techniques. In addition , computer and information application have been extended to include all scientific and human fields . In this research , the mathematical model , Known as the Markovian Model , has been used for modeling the eternal **Laa Ilaah Illa Allaah** (There is no God but Allaah) after making use of the computer for forming the transition matrix and processing it.

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Furthermore, some of the mathematical aspects related to this relation statement have been studied in addition to the linguistic investigation. The equilibrium distribution of the elements of the statement has been worked out yielding a number of features of numerical miracle.

The original scientific contribution that the in Allah has enabled the researcher to arrive at an other evidence that the Glorious Quraan is the eternal miracle over all ages and times.

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. (2006

. (2007)

Data mining

Nominal processes

Knowledge discovery

.Temporal sequences

Mathematical Modeling**-2**

() Mathematical Modeling

.Markovian Model

. Markovian property

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. (Ye, 2000)

. State

 $t=0,1,2, \dots$ $T=\{t: t=0, \dots, T\}$ Parameter space. $\{1, 2, \dots\}$ $X_1, X_2, \dots, X_k$. $S=\{X_1, X_2, \dots, X_k\}$ S State space

S ()

. $\{X_t; t \in T\}$ T**-3**

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(وَجَعَلَ فِيهَا رُؤُوسَ مِنِّ فَوْقَهَا وَبَارَكَ فِيهَا وَقَدَّرَ فِيهَا أَقْوَاتَهَا فِي أَرْبَعَةِ أَيَّامٍ سِوَاءٍ

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(لِلسَّائِلِينَ)

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$$[\quad]$$

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Symmetric matrix

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States

$$S = \{ \dots \}$$

:

t=4

t=3

t=2

t=1

.t

S

X_t

$$\{X_t\} \dots X_4 \ X_3 \ X_2 \ X_1$$

Transition Matrix

:

$$\begin{pmatrix} & & & \\ & & & \\ & & & \\ & & & \end{pmatrix}$$

.(Lawler,2006)

$$\begin{matrix} & & & X_n \\ \begin{bmatrix} 0 & 0 & 37 & 0 \\ 0 & 40 & 0 & 0 \\ 19 & 0 & 1 & 0 \\ 24 & 16 & 10 & 81 \end{bmatrix} & & & X_{n-1} \end{matrix}$$

37

37

40

40

: A

$$\begin{matrix}
 & & & & \mathbf{X}_n \\
 & & & & \mathbf{X}_{n-1} \\
 \begin{bmatrix}
 0 & 0 & 1 & 0 \\
 0 & 1 & 0 & 0 \\
 0.95 & 0 & 0.05 & 0 \\
 0.18 & 0.12 & 0.08 & 0.62
 \end{bmatrix} & & & & = A
 \end{matrix}$$

a_{ij} A

:

$$a_{ij} = P(X_n = j | X_{n-1} = i); \quad i, j = 1, 2, 3, 4$$

Transition Diagram

(1)

$X_2 \ X_1 \ X_4 \ X_3$

:

$$\begin{aligned}
 P(X_2 X_1 X_4 X_3) &= P(X_2|X_1) P(X_1|X_4) P(X_4|X_3) P(X_3) \\
 &= 1 \quad (0.62) \quad (0.95) \quad (1) \\
 &= 0.589
 \end{aligned}$$

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(19)

(35)

: {2,3,3,4}

4 3 3 2

:

$$4 \cdot 3 = 12 = 4 + 3 + 3 + 2$$

4

4332

$$4 \cdot 1083 = 4332$$

1083

$$4 \cdot 3 = 12 = 1 + 0 + 8 + 3$$

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$$3 = = =$$

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.Normal Distribution

: Equilibrium Distribution

$$\pi_j = \lim_{m \rightarrow \infty} a_{ij}^{(m)}$$

$$a_{ij}^{(m)} = P(x_{n+m} = j | x_n = i) ; m = 1, 2, \dots$$

j

π_j

. i

Exists

.Ergodic

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:

$$\pi_1 () = 19\%$$

$$\pi_2 () = 23\%$$

$$\pi_3 () = 27\%$$

$$\pi_4 () = 31\%$$

m)

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(2)

(2)

()

{ }

%31

%23

%27

. %19

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		-2
	()	-3
"	" (1999)	-4
11-10	(CSP 2006)	-5
	. 2006	
		-6
	" (2007)	

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