# Universe \& Solar System - A View of Measures in AI. by using 3'D Odd Magic Square 

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#### Abstract

In a Full moon day while, observe the space in the night, The numerous dots of light illuminate and enlightened in the sky. Those are millions of stars, Galaxies in the Universe! The centre of our solar system is SUN. It is source of Energy to dialect the planets aid in rotation and revolution. The planets are 1.Mercury, 2.Venus, 3.Earth, 4.Mars, 5.Jupiter, 6.Saturn, 7.Uranus, 8.Neptune. The Pluto and zena is beyond (Futility) the solar system. An array 3'D Matrix consist of the $\mathrm{x}[\mathrm{i}]$ Axis phases (Distance), y[i] Axis (Degree ${ }^{0}$ ), $\mathrm{Z}[\mathrm{k}]$ Axis (Depth/Height) in the form of $\mathrm{x}^{\mathrm{r}^{2}}$ or elements. This equilibrium of matrix elements are an array as a specific order and embedded in the Universe. It is infinite in space \& time complexity.


The Sun is about 30,000 light years from the centre of milky way. The diameter of the milky way is nearly $1,20,000$ light years and its central thickness is about 10,000 light years. The milky way is one of the Galaxy. There are nearly. $10^{10}$ such Galaxies, which are the building blocks of the entire vast universe!
Keywords: Begin to know the Chess Playing, Magic Square solar system and the Universe.

## INTRODUCTION

## Chess

The 'chess playing in AI is a defense game. So we can get the knowledge. Finally, it brings wisdom. The chess board consist of Black \& White Armies. Here only we deal with the positions of the chess board. The total number of elements $8 \times 8=64$. For Ex. The CARO - KANN DEFENSE the Hypermodern variation classify the Fastest movements based on the Super Computers. Ex. Deep thought or Deep Blue. Then, why
we need the chess playing? The question is arising naturally, so we will solve this problem through chess playing with the aid of Hypersonic Computers.

## Magic Square

The 'Magic Square' was invented by the Genius Srinivasa Ramanujam. This Theorem is also called 'Queens of the Mathematics". Because of we applying through Chess playing, we can extend the Base upto 360 of $x^{y^{z}}$. Nowadays our computers are 64 bit processor operating systems, Once we can beyond the 360 bit processor operating systems we can know the hidden surface things of the Universe. By applying 3'D 'ODD Magic Square' we can know the riddles of the Universe and Measures very Accuracy and Exactly.

## Universe

The Endless God is Infinite in Energy, Matter, Light, Dark, Space and Time!. Where is it's origin and beginning and End? Like the Light years, Stellar miles, The SRENU years Is an Excellent Measures of the Universe! The Objects [Matter] [The Galaxies, Stars, Planets, Satellites are-Parameters] are floating in the Universe. With the help of Energy the Centre Petal and Centre Fugal Force dialectics the entire Universe. Even though we can Measures the entire Universe: Telemetry Tracking and it's Exact positions. Once we find the centre of the Universe!!!.

## EXPLANATION

## Origin

The Basic concept is matter is $\mathrm{E}=\mathrm{mc}^{2}$. (Relativity Theory by Albert Instein). The matter is in the form of 1.Land, 2.Water, 3.Fire, 4.Air, 5.Space [Pancha Boothas]. This matter is changing it's positions on various time period seasons. Once while it is land [Periodic Table of Elements] it is in the form of matter. Once it is fire, we got the Energy in space and expand as Air, while Air is compressed beyond the energy level. It can be transfer as liquid or water. It is depends up on the mixture of Gas. When water $\left(\mathrm{H}_{2} \mathrm{O}\right)$ is separated as $\mathrm{H}_{2}$ and while warming. While $\left(\mathrm{H}_{2}\right)$ is highly inflammable as Fire.! The O is used to aid the fire.

The Energy has force. It has in the form of centre petal and centre fugal force. Same as the space is occupy vaccum and and atmosphere layer by layer in the solar system galaxy in the universe. By applying 3'D ODD magic square, we can get the dialects of planets in all aspects of Equilibrium. (Balance).

## REVIEW OF LITERATURE

## Existing system:

2'D ODD MAGIC SQUARE.
2'D EVEN MAGIC SQUARE.
Base -3,


Sum=15

| 1 | 15 | 14 | 4 |
| :---: | :---: | :---: | :---: |
| 12 | 6 | 7 | 9 |
| 8 | 10 | 11 | 5 |
| 13 | 3 | 2 | 16 |

Sum=34

F-Futility, O-Opposite, D-Down UR - Up \& Right. Futility means beyond the limit now a days, how to construct the Magic Squares by applying formulas.

## METHODS

## Theorem 1:

2'D ODD Magic Square
$\operatorname{Sum}=\sum_{\mathrm{i}=0}^{\mathrm{n}}\left[\frac{\mathrm{n}(\mathrm{n}+1)}{2}\right] /$ Base
Proof 1.

| 1 | 2 | 3 |
| :---: | :---: | :---: |
| 4 | 5 | 6 |
| 7 | 8 | 9 |


| 8 | 1 | 6 |
| :---: | :---: | :---: |
| 3 | 5 | 7 |
| 4 | 9 | 2 |

Ex.Base=3
$\mathrm{n}=$ Base $^{2}$
${ }^{\mathrm{n}}=9$
Sum $=\left[\frac{9 \times 10}{2}\right] / 3=15$
$\mathrm{C}=10 / 2=5$
C= Center
[Back Tracking]
C $=\frac{\text { Base }^{2}+1}{2}$

## Theorem 2

3'D ODD MAGIC SQUARE
Sum $=\sum_{\mathrm{i}=0}^{\mathrm{n}}\left[\frac{\mathrm{n}(\mathrm{n}+1)}{2}\right] /$ Base $^{2}$


Proof 2.
Ex: Base=3
$\mathrm{n}=\mathrm{xyz}$
$\mathrm{n}=81$
$n=$ Base $^{2}=9$
Sum $=\left[\frac{81 \times 82}{2}\right] / 9=369$
Sum $=\left[\frac{625 \times 626}{2}\right] / 25=7825$

## Proof 3

Ex: Base=5
$\mathrm{n}=\mathrm{xyz}$
$\mathrm{n}=625$
$\mathrm{N}=25$
$\frac{82}{2}=41$

Sum $=369$. To find the centre position $\mathrm{C}=\left[\right.$ Base $\left.^{2}+1\right] / 2$
The Solar System is in Equilibrium on the magic square

|  | Mean <br> Distance from <br> the sun <br> (Millions of <br> km ) | Mean <br> Diameter <br> (Thousands <br> of km) | Relative <br> Mass (Mass <br> of Earth=1) | Period of <br> Revolution <br> (Planet's year) | Period of <br> Rotation | Mean <br> Density <br> $(\mathrm{g} / \mathrm{cm} 3)$ | Known <br> Satellites or <br> Moons |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun | - | 1384 | 33,300 | - | $25-31$ <br> days | 1.4 | - |
| Mercury | 58 | 4.8 | 0.05 | 88 days | 59 days | 5.4 | 0 |
| Venus | 108 | 12.1 | 0.82 | 225 days | 244 days | 5.2 | 0 |
| Earth | 150 | 12.6 | 1.00 | 365 days | 24 h | 5.5 | 1 (moon) |
| Mars | 228 | 6.7 | 0.11 | 687 days | 24.6 h | 4.0 | 2 |
| Jupiter | 778 | 142.4 | 318 | 12 years | 9.9 h | 1.3 | 63 |
| Saturn | 1,427 | 120 | 95 | 29 years | 10.3 h | 0.7 | 61 |
| Uranus | 2,871 | 49.6 | 14.4 | 84 years | 17.3 h | 1.3 | 27 |
| Neptune | 4,498 | 44.8 | 17.15 | 165 years | 16.1 h | 1.76 | 14 |
| Moon | - | 3.46 | 0.01 | 27.3 days | 27.3 days | 3.4 | Satellite of |
| the earth |  |  |  |  |  |  |  |

SUN[i]=Mercury[i]+Venus[i]+Earth[i]+Mars[i]+Jupiter[i]+Saturn[i]+Uranus[i]+Neptune[i]Futility[i].
$\mathrm{F}(\mathrm{x}): \rightarrow \mathrm{y} . \mathrm{x}$-domain, y -Range of the function (parameters).



## Theorem 3:

2'D Base Theorem: By Applying chess.
Ss $=\sum_{\mathrm{i}=0}^{\mathrm{n}}$ Base $^{\mathrm{e}(\text { were } \mathrm{e}=+\mathrm{i}+0)}$
$\mathrm{i}=0$ initialization, n-Final element, Base-may be a 3, 4, 8, e-Exponential form
R-Rook, Kn-Knight, B-Bishop, K-King, Q-Queen, $\mathrm{S}_{1}, \mathrm{~S}_{2}, \mathrm{~S}_{3}, \mathrm{~S}_{4}, \mathrm{~S}_{5}, \mathrm{~S}_{6}, \mathrm{~S}_{7}, \mathrm{~S}_{8}$ Soldiers
FILES: - Columns [A, B, C, D, E, F, G, H], RANKS - Rows [1, 2, 3, 4, 5, 7, 8]

| CHESS <br> BLACK |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G | H |  |
| 1 | R | Kn | B | K | Q | B | Kn | R | 8 |
| 2 | $\mathrm{S}_{1}$ | $\mathrm{S}_{2}$ | $\mathrm{S}_{3}$ | $\mathrm{S}_{4}$ | $\mathrm{S}_{5}$ | $\mathrm{S}_{6}$ | $\mathrm{S}_{7}$ | $\mathrm{S}_{3}$ | 7 |
| 3 |  |  |  |  |  |  |  |  | 6 |
| 4 |  |  |  |  |  |  |  |  | 5 |
| 5 |  |  |  |  |  |  |  |  | $1^{4}$ |
| 6 |  |  |  |  |  |  |  |  | 3 |
| 7 | $\mathrm{S}_{8}$ | $\mathrm{S}_{7}$ | $\mathrm{S}_{6}$ | $\mathrm{S}_{5}$ | $\mathrm{S}_{4}$ | $\mathrm{S}_{3}$ | $\mathrm{S}_{2}$ | $\mathrm{S}_{1}$ | 2 |
| 8 | R | Kn | B | K | Q | B | Kn | R | 1 |
|  | h | g | f |  | $\stackrel{\mathrm{d}}{\mathrm{VHIT}}$ |  |  | a |  |

## Proof 3:

In a chess playing AI, a soldier can move 3 possible ways [Left, Middle, Right] in 7 Positions ( 7 phases). And the Base is 3 .
$3^{0}-1,3^{1}=3,3^{2}-9,3^{3}-27,3^{4}-81,3^{5}-243,3^{6}-729$, Weight $=1093$.
This Base theorem is applied with Huffman Adjacency Code \& Matrix.

## Theorem 4:

3,D Base Theorem: By Applying

$$
\begin{array}{lll}
s S= & \sum_{i=0}^{n} \quad y^{z} \quad(\text { where } e=i+0) \\
\text { Base }=x, y, z \text { The Base may be } 360 .: \quad x^{36} & y^{36}
\end{array}
$$

Weight [I] [J] [K] = xxxxxxxx

This is called Srinivasa Ramanujam's Expanding Numbers of the Universe. [SRENU]


Now we taken
Base=3
$\mathrm{N}=$ Base $^{2}=9$
This parameters extend upto only 0-4 phases only.
Hence SUN and its 8 planets equilibrium is derived.

## TECHNIQUES

| 2'D ODD Magic Squares |  |  |  | Base n $\quad \mathrm{I}_{\text {th }}$ Row \& $\mathrm{J}_{\text {th }}$ Column No |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Squares(n } \\ ) \end{gathered}$ | $\begin{aligned} & \text { Last } \\ & \text { No } \end{aligned}$ | Middle No | Sum (m) |  |
| $\begin{gathered} \mathrm{N} \\ \text { (Base) } \end{gathered}$ | $\mathrm{n}^{2}$ | $\begin{gathered} \left(\text { Base }^{2}+1\right. \\ \frac{)}{2} \end{gathered}$ | $\left[\frac{\mathrm{n}(\mathrm{n}+1)}{2}\right] /$ Base $\begin{gathered} \text { Or } \\ \frac{\left(n^{2}+1\right)}{2} / n \end{gathered}$ | $\mathrm{n}\left(\left(\mathrm{I}+\mathrm{J}-1+\left[\frac{\mathrm{n}}{2}\right]\right) \bmod \mathrm{n}\right)+((\mathrm{I}+2 \mathrm{~J}-2) \bmod \mathrm{n})+1$ |


| 3'D ODD Magic Squares |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Squares(n) | Last No | Middle No | Sum (m) | Weight [1] |
| $\begin{gathered} \mathrm{n} \\ \text { (Base) } \end{gathered}$ |  | $\frac{\left(\text { Base }^{2}+1\right)}{2}$ | $\begin{gathered} {\left[\frac{\mathrm{n}(\mathrm{n}+1)}{2}\right] / \text { Base }^{2}} \\ \mathrm{Or} \\ \frac{\left(\mathrm{n}^{2}+1\right)}{2} / \text { Base }^{2} \end{gathered}$ | $W[i]=x[i]+y[j]+z[k]$ on the basis of $3^{\prime} \mathrm{D}$ Array $\mathrm{W}[1]=$ weight [1] |

## RESULTS

| S.No | Phase | Number of <br> elements | Total Number <br> of elements | Difference | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0 | 1 | - | - |  |
| 2 | 1 | 8 | 286 |  |  |
| 3 | 2 | 16 | $\left.\begin{array}{c}246 \\ 2\end{array}\right\}$ | 360 | For about/almost 360 the difference is <br> $(+$ or - up to 10) |
| 4 | 3 | 24 | $\left.\begin{array}{l}1014\end{array}\right\}$ | 368 |  |
| 5 | 4 | 32 | $\left.\begin{array}{l}1373\end{array}\right\}$ | 359 |  |
|  |  | 81 | 3321 <br> Total | Avg=360.26 |  |

Sum of the Series

$$
\frac{\mathrm{n}(\mathrm{n}+1)}{2} \quad \frac{81 \times 82}{2}=3321
$$

Formula
Centre $=1$. Anything power $0=1, C+0 \times 2^{3}+1 \times 2^{3}+2 \times 2^{3}+3 \times 2^{3}+4 \times 2^{3}$,

$$
1+8+16+24+32=81 .
$$

Analysis the Graph.

## DISCUSSION

We cannot draw 3'D drawings on the $2^{\prime} \mathrm{D}$ paper easily. We cannot find the exact positions without the aid of Hypersonic Computers.

## CONCLUSION

The Universe is infinite in space and Time, imagine the vastness of the Universe, Even though we can measures it. Good! God bless you!!!

## References

[1] Artificial Intelligence - Elaine rich \& Kevin Knight.
[2] General studies-(UPSC-prelims) - Mc-Graw hill Edition.

