Universe   - A View of Measures in AI

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Abstract

How Beautiful !!!, - It is to observe the sky in the Universe! In the days, the Sun shines brightly!. As the evening descends the numerous dots of Light illuminate in the night sky. The Moon Glorious light in the night! we are concealing poor men before the Endless God !!!

INTRODUCTION

Chess

The Art of Chess is a Defence Game! This is a real battle field between two Armies or more Armies. The Strategy and Tactics are powerful Weapons. The Chess is a game of Winners Losers and draw in the matches. By applying AI, The Computer can get Artificial Intelligence [AI]. Even, the computer do best moves against man in the chess game, The scientific inventions are most helpful for human progress. His scientific searches are continues!

Universe

The Endless God is Infinite in Energy, Matter, Light, Dark, Space and Time!. Where is it's Origin and the beginning and End? The Genius Srinivasa Ramanujam's, Expanding Numbers of the Universe, 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 !!!.

EXPLONATION 1

It is very difficult to Imagine the vastness of our Universe. Our Galaxy is Milky way, the star Sun is in the Milky way. The Sun is 33,000 Light years away from the centre of the Galaxy. The Light of some of stars may take the millions of years to reach us. There are countless stars whose lights are still travelling but have not reached us yet!. The distances in the Universe are measured by Light years, stellar miles, The Light travels at the speed of 3,00,000 kms (1,86,000 miles) per second. The Light year consist of the distance Light travels in one year in the Universe. The Light of the nearest star is (Proxima centauri) to the Earth reaches in 4.2 years. There are several globular and spiral Nebula (stellar Islands) around our milky way. The Andromeda Nebula is relatively closer to us, i.e 6.2×10^5 light years. The solar system revolves around the Milky way with the speed of 285 km per second. The diameter of our Galaxy with Milky way is about 10^5 light years. It contains more than thousand million stars. Our Sun with solar system is about 30,000 light years away from the centre of the Milky way. Like other stars, the Sun with its solar system is revolving around the centre of the Milky way. The period of revolution is about 22×10^6 years. Our solar system is a small part of the system of stars collectively known as spiral Nebula or the Galaxy.

EXPLONATION 2

Solar system

When the burst of Nebula the matters spread throughout in space then condensed and finally solid and produced many planets revolve round the sun is Elliptical and circular Orbits. There was 10 planets, now the solar system has 8 planets only. The Pluto was a planet but now it is beyond the limit. The planets Revolves around the Sun. The Sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. It is created by the Pancha Boothas. We can measures the Movement of the Sun, Planets, Satellites, comets etc. The Revolution, Rotation, centre petal, centre fugal, Gravitational Force are not clearly yet derived. The Paths [Rotation and Revolution], Mass, Matter, Magnetism, Energy Gravitation and force are the Parameters. So we can find the Telemetry, Tracking and it's Exact Positions etc. The SUN has obtain 25 days to Spin or it's own Axis, and Revolving the Milky way in every 225 million years. The speed of the milky way is 7,14.000 kms per hour. The sun is the centre of the solar system. The sun has three zones. 1. corona 2.chromospheres 3. Photosphere. The Sun is the biggest member of the family, it is million times larger than our Earth . It is made of Extremely hot Gases, it's interior part has 20 million $^{\circ}$ c and it's surface temperature is 6,000 $^{\circ}$ c. The interior part of the Sun has Block holes. It does not allow any Radiation. It is the source of all Energy, i.e, the heat and light for the entire solar system, without the energy, the Earth would be cold and lifeless. The Sun is about 150 million kms away from the Earth. The light travels with a tremendous speed of about 3,00,000 kms per second. The light of the sun takes about 8.2 minutes to reach us the Earth. Some celestial bodies do not have their own heat and light. They only reflect the light which they receive a star

like the sun, these are called planets. The word planet means 'wanderer'. The Beautiful moon with its changing shape as No moon, New moon, Crescent and Full moon. It visible for part of the month, All Objects The Sun, the Moons and millions of bright objects seen during the night!.The diameter of the Universe is measured in many thousands of millions of light years. It means that the Universe is infinite in Matter –Energy SPACE and TIME.

REVIEW OF LITERATURE

S.no	Scientists	Theories
1.	Immanuel kant	Gaseous Hypothesis.
2.	Laplace	Nebular Hypothesis.
3.	J.c. Chamberlin & Ray moulton	Planets simal Hypothesis.
4.	Sir James Jeans	Tidal Hypothesis.
5.	Harold Jeffreys	Collision Hypothesis.
6.	H.n. Russel	Binary star Hypothesis.
7.	F.Hoyle	Super nova Hypothesis.
8.	Otto Schimidit	Inter stellar dust Hypothesis.
9.	Cobe	Big Bang Theory
10.	John Gribbin	Milky Way.

METHODS

Before 5000 years ago the Chinese invented the first calculating device is called Abacus. In 1823 Charless Babbage proposed a calculating device. 1. Difference Engine 2. Analytical Engine. The first Electronic Computer was– ABC. The ENIAC was invented during 1940's for the US – ARMY. **Generation: 1**st Generation (Vacuum tubes) 2nd Generation (Transistors) 3rd Generation (IC) 4th Generation (Microprocessor) 5th Generation (AI) and now searches in the SUPER COMPUTERS & HYPERSONIC COMPUTERS [BASE 360].

Microprocessors

The first Microprocessor Chip was INTEL 4004. The first personal computer Apple 1 was developed in 1974. The Other Microprocessors are 1. APPLE, 2.PENTIUM, 3.POWER PC, 4. CELERON, 5 AMD, 6. IBM, 7. ATHLON, 8. ZELOG, 9. CYREX.

Languages

1st Generation (Machine Language) 2nd Generation (Assembly Language) 3rdGeneration (High level Language) 4th Generation (4GL) and 5th t Generation (AI).

Characteristics

The computers are classified into Analog - Digital – Hybrid – Super Computer – Hypersonic Computers. 1. Accuracy 2. Speed, 3. Automatic, 4. Endurance, 5. Versatility, 6.Storage, **Memory:** Memory: Primary Memory - Secondary Memory The Computers are Measured in BYTES or WORDS. Now we have 64 Bit Operating System, So we have 360 Bit Operating System To attain the Goal.

NUMBER SYSTEM

The Computer Thinks in Binary [0's & 1's] so the Base is represented in the Number system. The Binary Number system: are. 2^8 2^7 2^6 2^5 2^4 2^3 2^2 2^1 2^0 . 2^{-1} 2^{-2} 2^{-3} 2^{-4} 2^{-5} 2^{-6} 2^{-7} 2^{-8} .. THE BASE [360] NUMBER SYSTEM: Hence, the Base is 360. It has 360 digits from 0 to 359. It has positional weights same as Binary, …360^8 360^7 360^6 360^5 360^4 360^3 360^2 360^1 360^0 . 360^{-1} 360^{-2} 360^{-3} 360^{-4} … of [X,Y,Z] phases 0,1,2,3..N. The Magnitude Comparator is used to analyse logical relational manipulations. **Boolean Functions:** The Exponent Form consist of 1.MANTISSA 2.EXPONENT. it is used to shrink.

Boundary

Performance Analysis. & Performance Measurement. It has classified into two ways. 1.SPACE Complexity and 2. TIME Complexity. The Space complexity is to determine and take the Amount of Space of the Entire Universe of it's boundary or it's Domain. The Time complexity is to determine and take the time of the Entire Universe of it's boundary or it's Domain. Circular (e = 0.) Ellipse (e < 1). Parabola (e = 1) Hyperbola (e > 1).

Measurements

The Physical Quantities: 1.Scalar Quantities: The Mass, Length, Time, Volume, Speed, Energy. 2.Vector Quantity: The Velocity, Momentum, Force, Acceleration. 3.Circular Measures: The Seconds, Minutes, Radian, Degree. 60 Seconds = 1 Minute, 60 Minutes = 1 Degree, 1 Radian = 57° 17° 44.806, 360° = 1 Circumference. Day (24hours), year(365 days), leap year(366 days), Light year (9.46 x 10^{15} m) , Stellar years, SRENU years etc.

TECHNIQUES

The Base Theorem: Base Power of [X,Y,Z]. The Entire Solar system of its Objects are the SUN – and it's [Planets]Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune. The Pluto is beyond the limit of the solar system. The more than   125 Satellites are in the solar system. The Earth has only one Satellite Moon. The other Satellites are such as Titan and Comets etc. They   are   measured in the form of Data base design and File base design. It is based on +ve integer from 0 to 360 of on the Power of [X,Y,Z]. it is also called Space Complexity. Holy Path Theorem: To find

Exact Location of the entire Solar system by the following Theorem is used.The Huffman Adjacency code is a balanced branches from 0 to 360, on the 3'D Tree Structure consist of Root, Leaf, Leaf weight, Search of X-Axis, Y - Axis, Z − Axis. It is a Path Specification of Entire Solar system, it may be a single path or multiple path. The Huffman Adjacency Matrix consist of Matrix on the Array of the entire Solar system in the form of 3'D Matrix it consist of Primary Array Index., Secondary Array Index. Sparse Array Index. Dense Array Index. The Simple Plex Weight Theorem consist of graph on the Explicit Domain of the Chess Array. Complex Plex Weight Theorem consist of also Backtracking of the 3'D Array. The Single Path Theorem: consist of Single Path of the Entire Solar system. The Butterfly Network consist of Base, Leaves, Leaf Weight, Remainder on the Divide by method. Shortest Path: Avoid the path of Backtracking Paths & Eagle's Theorem: etc.

Parameter of the Planets

The Solar system consist of the Sun and the eight planets. The Space and Time Complexity of it's Limitation consist of it's Boundary. All the planets are floating in the form of Rotation and Revolution on it's own orbits, around the Sun around the Galaxy, and around the Universe. EARTH: Age :4.6 Million years. Mass: 5.976×10^{24} Kg. Volume : 1.083×10^{24}. Density: 5.58 Kg/litre. Shape: Geoid. Rotation: 23 h - 56 m 4.09 Seconds. Revolution: 356 days-5h-9m-9.54 seconds. Mean Distance 149,598,500 Kms from the Sun. Minimum Distance, Orbital Speed, Magnetism, Centripetal force, Centrifugal force, Gravitational force Light − Dark Begins and Ends etc.

Performance Analysis. & Performance Measurement

Explicit Domain [Man vs Man]. **Implicit Domain** [Man vs Computer]. Explicit Domain: The Chess board consist of 8 x 8 = 64 Arrays in alternatively Black and White squares. They are Soldiers, Rooks, Knights, Bishops, King, Queen etc are it's elements of both Black and White players. The Files [Columns] are consist of A,B,C,D,E,F,G,H. The Ranks [Rows] are consist of 1,2,3,4,5,6,7,8. Hence W[i,j] = W[Row, Column] = W[Ranks, Files]. Implicit Domain: Tree Generator. **Path Specifications:** The Path Specifications consist of Positional Status of the Pieces or Rule Applier. **Huffman Adjacency code: Graph :** A Graph consist of G (V,E), Vertices and Edges, it has, 1.Root, 2. Vertex (or) Vertices, 3.Edge (or) Edges (or) Paths, 4.Levels (or) Phases, 5.Leaves, 6.Leaf Weight, 7.Base, 8.Mod, 9.Remainder, 10.Missing Nodes, 11.Decode, 12.Encode, 13.Weights, 14.Tree Structures, 15.Forests, 16.Union etc.

Parameter of the chess pieces.

The Chess Array consist of 64 Arrays. Of it's Objects are 32. It is mounted on the Root in the form of Files and Ranks. The Space and Time Complexity of it's Limitation consist of it's Boundary. It's beyond the limit of the boundary is Futility. Hence it is consist of the Implicit Domain. The Searches are in the DFS, BFS, Best first search, A * Algorithm, Problem Reduction, Constraint Satisfaction, Means Ends Analysis, Mini Max Procedure, Alpha Beta cut off etc.AI: The Robot is a Mundane

Task. The Chess is a Formal Task. The State Space consist of in the form of Base Theorem. The Control strategies of the Searches are DFS, BFS, Best first search etc while Backtracking, Level by Level of the Queue etc. The Path Specification consist of paths of the Pieces are stored by stack. The A* Algorithm describes F'[SUCESSOR] = G[SUCESSOR] +H'[SUCESSOR]. The AO* Algorithm describes the Futility and the paths are Open or Closed. The Forward Vs Backward Reasoning create the searches of the Variables Matching – Indexing – Conflict Resolution of the Bi-directional Meet etc. Finally we can get the Winning Position etc.

RESULTS

We can measure the entire UNIVERSE –SOLAR SYSTEM by Telemetry, Tracking and it's exact positions and finally paths are derived.

DISCUSSION:

 We cannot find exact positions without the Aid of computer.

CONCLUSION:

This is Real beginning When will it End!!!!.

References

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