BIG DATA ANALYST AND OPTIMISER

in GNU OCTAVE

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Summary :

Big Data Analytics are so important for a business corporation or Real Time Monitoring in Engineering Applications where huge amount of data is to be handled and processed continuously. However, those data lies as outputs or get processed or collected. In order that they stand as precious values for Post- Processing for the futuristic evolution of the particular system on which the Big Data is collected, they need to be interpreted in different fashion.

Goals:

• To study and optimise the data from Big Data,

• To know the feasibility of data (actual parameter) in the future.

• Use the Image Processing Technique from imagė in Octave Forge on curve or image generated from the present data (ex: a Surface Curve)

• Determines future output by implementing Optimization algorithm

How It works:

1. The various values of every parameter in the system is obtained as an input Big Data 2. The Hidden sequence or the path of the values is studied chronologically with respect to time or any other parameter of concerned interest. 3. The approximate function which governs the values to a given parameter is identified. 4. The function is then used to generate a required curve 5. It is studied by Image Processing. This is done to have whole set of data into consideration. By having a three dimensional curve or image, it can be easy to process and validate each pixel or point. 6. Then, the governing function which are approximated are precisely sharpened to the required accuracy by having the user to provide the

importance/ weightage of one parameter over the other.

7. This is done by optimization technique. 8. Thus, a Post Processing like technique is done and estimated values are

determined. 9. The best way of modification in present to have best output in future , is

found. 10. Thus required future values can be obtained just by modifying the

system parameters to the least modification.

Timeline:

It might take more than three months for the Project to handle incredibly Big Data with more parameters associated with.

However, for applications like Business growth concerned with Profit/Loss in each Quarter, real time monitoring in Automobiles with limited range (say only Brake Failure Detection, Fuel consumption over varied Speeds and Terrains) , the project might need atleast two months.

Commitment:

Semester in May [Would take six days- Not yet announced]

About me:

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