

# Superiority of Sanskrit Language in Tele Communication & Computing

Shashank Mani Tripathi

Institute of Engineering & Technology, Bundelkhand University Jhansi

innovativeshashank@gmail.com

Sanskrit language is the mother of all languages and it is one of the most superior languages of the world. It is the ancient traditional Indian language which has got the golden opportunity to be an integral part in space communication as a computer language at NASA.

For this United State government has started special programs to motivate its young generation to understand, learn and deploy the power of Sanskrit language.

It is true that the Indian Culture is entirely based on the strong foundation of Sanskrit Language. The main power of Sanskrit literature lies on its philosophy, law, science, literature, grammar etc.

It is an object Oriented programming based language. It has shown a great potential to become a computing language. Talking to the old ancient civilization, Sanskrit language has made two significant contributions in the development, growth and progress of science in ancient India. Firstly it has enabled the Science based ideas to be expressed with high precision and logic. Science is the systematic knowledge derived from observations, information, & understanding which requires a written language in which ideas can be embedded with a highly précised manner and requires logical interpretation. Secondly, for the progress and advancement in science, a philosophy is required to give support and encouragement to science and scientific development.

In 5<sup>th</sup> century B.C. Greatest scholar and grammarian of the world, Maharishi Panini, wrote a renowned book `Ashtadhyayi`. Here grammatical rules of Sanskrit are so stronger that no further changes in Sanskrit were permitted except slight changes made. What Panini did was that he studied carefully the existing Sanskrit language in his time later on it was refined, purified by him in a systematic manner so as to make it one of the greatest logical and precise language. As a result of his hard and fruitful work Sanskrit had become a highly developed and powerful language to express the scientific ideas with great precision and clarity.

**“Sanskrit is the ideal language for computer science”** is a view that is so widespread in India, that my mother, who is 46, and knows little about Sanskrit, and even less about computer science, passionately believes this, and I can't convince her otherwise.

According to my knowledge and experience about Sanskrit, I will focus on two aspects:

- Being the first language to have a former grammatical definition shows a evidence that modern linguists like de Saussure and Chomsky were also greatly influenced by the renowned work of Maharishi Panini.
- In 1980s a researcher in NASA tried to develop Sanskrit as an ideal language for the development of applications for Artificial Intelligence.

### **Sanskrit as an ideal language for AI applications**

In 1985, a research paper for the Association for the Advancement of Artificial Intelligence titled Knowledge Representation in Sanskrit and Artificial Intelligence was written by Rick Briggs. At that time, AI researchers were involved in the construction of artificial languages that could be used in AI to prevent computers from dealing with the ambiguities of real languages.

Sanskrit is the only human spoken language which has a context free grammar which means that it is bit difficult to write a compiler which can read and understand (parse) English sentences because of the ambiguous nature in English sentences; but very easier to write a compiler for Sanskrit which can understand that language and thereafter converting the instructions into binary language.

If a global trend is made to follow to make all the geeks behind computer software as advanced sanskrit speakers instead of english then all other programming languages like php, json, java, sql etc. were simply parsing sanskrit sentences. If Sanskrit would be made the prominent language in computer science instead of english then present database and data design languages like sql or c will lose their existence. One just has to write the compiler to parse sanskrit sentences and normal sanskrit language sentences can be used to query databases. Also Sanskrit never needs loan words no matter what new technology or concepts get invented or discovered. In Sanskrit language there is a built in mechanism that aids in creating meaningful new words based on attributes.

Sanskrit is the best language to store information which is a key requirement in IT. The Core features of Sanskrit Language are multidisciplinary and multi-dimensional. One of its core features is that for a single object multiple names can be created. It is a context based language. It is all about names of attributes and properties, not of things and objects. So Sanskrit can be seen as the most powerful language of the upcoming era.

### **References**

Article on Knowledge Representation in Sanskrit and Artificial Intelligence by Rick Briggs  
RIACS, NASA at Ames Research Centeu, Moffet Field, California 94305