

# C R Rao Advanced Institute of Mathematics, Statistics & Computer Science (AIMSCS)

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Website: http://crraoaimscs.org

Seminar on

### Machine Learning for Computational Analysis of Telugu Language

by

#### Prof. Venkat N. Gudivada

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## Date and time: 4th August 2017, Friday at 11:00 am Venue: Ramanujan Building, C R Rao AIMSCS

**Abstract:** Cognitive mechanisms behind language acquisition, processing, and evolution continue to remain a mystery. From this perspective, language is a human miracle. Language is more than a medium for communication. Language and culture are tightly intertwined. Languages should be preserved and celebrated for their beauty and diversity rather than passively accepting state sponsored efforts to establish the primacy of one language over others.

There are 7,099 known living languages in the world. India is home to 462 languages, of which 448 are living, and 14 are extinct. Of the living languages, 55 are in trouble of extinction, and 13 are dying. Telugu is one of the classical Indian languages with a vast literature, rich vocabulary, and melodic sounds. It used to be the second most spoken language in India. However, recently its position has slipped to third. Classical languages in India including Telugu are under a severe assault from both English and Hindi. If the current trends go unchecked, by 2050, there will be a dramatic decrease in the Telugu speaking population. Furthermore, the language will lose its original melody and rich vocabulary through an unbridled infusion of words from languages such as English and Hindi.

Computer Science offers unprecedented opportunities to save, revive, celebrate, and advance all human languages. In this talk, I will discuss how big data and machine learning can be leveraged to preserve and promote languages in general, and the Telugu language in particular.

#### Brief Biodata of Venkat N. Gudivada:

Venkat N. Gudivada is a professor and chair of the Computer Science Department at East Carolina University.

His research interests include data management, information retrieval, cognitive computing, natural language understanding, high-performance computing, and personalized learning. Gudivada received a Ph.D. in computer science from the University of Louisiana at Lafayette.

Dr. Gudivada has over 30 years of professional experience spanning both academia and industry including the University of Michigan, Missouri University of Science and Technology, Ohio University, and Wall Street companies. He has published over 100 peer-reviewed research articles which have received a total of over 2,550 citations. He received research funding over USD 5 million from NSF, NASA, DOE, U.S. Department of Navy, U.S. Army Research Office, among others.

