

**Centre of Behavioural and Cognitive Sciences  
University of Allahabad**

**Foundation Day Lecture  
October 28, 2022**

The Centre of Behavioral and Cognitive Sciences, University of Allahabad celebrated its 21st Foundation Day on 28<sup>th</sup> October, 2022. On this occasion the Centre organized a Foundation Day Lecture, “Compositionality in Brains and Machines” by Prof. Bapi Raju S, International Institute of Information Technology, Hyderabad on October 28 at 11:00 am.

The session began with a brief report on the accomplishments of the Centre during the past year by the Head of the Centre, Prof. Bhoomika R. Kar followed by an invocation with a Bharatnatayam performance by Amruthavalli, a second-year masters’ student at CBCS. This was followed by an interesting deliberation about compositionality in cognition (vision, language and action) by Prof. Bapi Raju who is a distinguished professor-researcher currently an esteemed faculty member in the Cognitive Science Lab in IIIT Hyderabad. His research interests include neural networks, cognitive modelling and pattern recognition. He has been associated with CBCS since its inception. In his talk he reviewed the strengths and weaknesses of foundational models such as DALL-E-2 and GPT-3, highlighting their limitations in composable generalization. He explained that the combinatorial nature of compositionality poses enormous problems for machines but at the same time, it is intriguing how humans and some animals accomplish this effortlessly. The talk ended with suggestions as to how Cognitive Science can offer insights into deep learning methods. Prof. Janak Pandey, Founder Head, CBCS, congratulated the Centre for its contribution to the field of cognitive science and encouraged the faculty and students, emphasizing upon the multi-faceted growth of this discipline in India. The session ended with vote of Thanks proposed by Dr. Niharika Singh, Faculty, CBCS.

The Centre also organized a session on 29<sup>th</sup> October, 2022 with two of its alumni, Dr. Ark Verma, Assistant Professor, Dept of Cognitive Science, IIT Kanpur and Dr. Abhilasha, Usability Engineer, Philips, Bangalore. Dr. Verma delivered a talk based on his recent research on “How the ‘Self’ may guide our social behaviour”. Dr. Abhilasha discussed about cognitive science applications in the industry and interacted with MSc/PhD students responding to their questions/concerns about a career for a cognitive science graduates in the Industry.



Foundation day Lecture by Prof. Bapi Raju, IIIT Hyderabad on October 28, 2022



Talk by Dr. Ark Verma, Dept of Cognitive Science, IIT-Kanpur (left). Dr. Abhilasha, Usability Engineer, Philips, Bangalore (right) on October 29, 2022