

# Hari Sahasrabuddhe Lecture Series\*

A rare event to hear from the most distinguished figures in computer science

## RAJEEV ALUR



University of Pennsylvania

An alumnus of **IIT Kanpur** and Stanford, Prof. Rajeev Alur is one of world leaders in the field of "Design and Analysis of Safe and Trustworthy Systems". He has won several accolades including the prestigious **Knuth prize**, the **inaugural Alonzo Church award**, the **IITK distinguished Alumnus award** and the **inaugural CAV (Computer-Aided Verification) award**.

Rajeev Alur is currently Zisman Family Professor of Computer and Information Science and the Founding Director of ASSET Center for Trustworthy AI at University of Pennsylvania.

## Talk: Learning Symbols for Trustworthy AI

Recent advances in deep learning have led to novel AI-based solutions to challenging computational problems. Yet, the state-of-the-art models do not provide reliable explanations of how they make decisions, and can make occasional mistakes on even simple problems. The resulting lack of assurance and trust are obstacles to their adoption in safety-critical applications.

Neurosymbolic learning architectures aim to address this challenge by bridging the complementary worlds of deep learning and logical reasoning via explicit symbolic representations. In this talk, I will describe representative neurosymbolic systems, and how they enable more accurate, interpretable, and domain-aware solutions to problems in healthcare and robotics.

**Time @ 5:15 PM, Saturday 9<sup>th</sup> August, 2025**

**Venue @ RM101, CSE, IIT KANPUR**

\* This lecture series is established by a generous donation from **Shri Narayana Murthy ji** (one of the founders of Infosys) in honour of **Prof. Hari Sahasrabuddhe**, an outstanding teacher and a former faculty member from the Department of Computer Science and Engineering, IIT Kanpur.