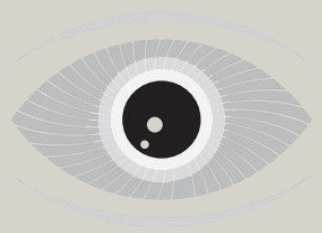


Rajaraman Lecture Series



Eyes-on-Research

Department of Computer Science And Engineering



Creativity, Discovery, and Learning in the Age of AI



Prof. Nisheeth K. Vishnoi

Abstract: When you learn or create something new, much of what matters actually happens beneath the surface. Real understanding is more than just a mental exercise; it is a lived experience. It grows through the physical and emotional work of trying, failing, and repeating. It is the slow process of building a gut feeling for what works. This is how you develop a coherent understanding of the world and the confidence to judge your own ideas.

Modern AI tools change this experience. Because these systems can produce fluent, confident answers instantly, they shift your attention toward the finished result and away from the messier process of learning. This contrast makes a vital distinction clearer than ever before: producing an answer is not the same as understanding it, and getting an output is not the same as knowing why it matters.

This talk uses AI as a mirror to reflect on how we learn. We will explore how your intuition and judgment grow out of your own experiences, why the hard work of checking and verifying ideas is essential, and how a growing reliance on AI might reshape your independence as a thinker. In a world where machines can generate almost anything, we will ask: what does it truly mean to discover, to create, and to know for yourself?

Nisheeth K. Vishnoi is the **A. Bartlett Giamatti Professor of Computer Science at Yale University** and a co-founder of the **Computation and Society Initiative**. His work spans mathematics, theoretical computer science, and optimization, with a focus on how computation shapes the world around us. In recent years, his work has turned to understanding how modern AI systems are reshaping work, learning, and discovery.

He has authored several books and monographs, received multiple best paper awards, and is a **Fellow of the ACM, IEEE, and the American Mathematical Society**. He also writes **The Intelligence Loop** (<https://nisheethvishnoi.substack.com/>), a Substack on intelligence, AI, and the human implications of computation.

Time: **5:15 PM, Tuesday 6th January, 2026**
Venue: **RM101, CSE**

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