

Goa Business School, Goa University and ACM Goa Professional Chapter presents

A Talk by Prof. Viraj Kumar, IISc Bangalore

# Rethinking Learning Outcomes and Assessments for Programming Courses in response to Generative AI



On 15<sup>th</sup> July 2024 2:30pm - 3:30pm

**Venue (in-person):**  
FF8, First Floor  
Lecture Hall Annexe  
Goa Business School  
Goa University  
Taleigao Plateau, Goa

Register on this link for ACM Goa

event updates:

<https://forms.gle/hai1vbuXSUMHMKa96>

## Abstract

Learning outcomes in most introductory programming courses emphasize code writing, in line with the recommendations of the ACM/IEEE-CS Curricula (CS2013). The new ACM/IEEE-CS recommendations (CS2023) broaden this emphasis to code development, which is defined as designing, writing, testing, and debugging code. CS2023 acknowledges that "it is too early to confidently predict how Generative AI will change computer science education", but it nevertheless notes ramifications that are "already apparent". As a basis for discussion, we describe one possible response to these ramifications: the changes we have made to the learning outcomes and assessments for the introductory programming course at IISc. We also highlight some of our recent research that informs and supports our approach.



## Speaker

Viraj Kumar is a Visiting Professor at the Kotak-IISc AI-ML Centre, and an elected member of the ACM India Council. He heads ACM India's committee on Educational Initiatives, and his primary research area is Computer Science education. His recent work has focused on understanding the impact of Generative AI on teaching-learning practices for CS and other engineering disciplines. He co-authored IISc's policy on AI usage for teaching-learning and research, and he presently serves as a member to the Ministry of Education's Committee to study the impact of AI on Engineering Education. Previously, Prof Kumar served as a consultant to the Kasturirangan Committee to draft the National Education Policy (NEP 2020). He holds a PhD in Computer Science from the University of Illinois at Urbana-Champaign (2007).

