Learning as a Living System: Reimagining Engineering Education in the AI Era

Mahesh Venkataraman
Managing Director, Accenture India

Mahesh Venkataraman is a Managing Director at Accenture and a senior technology leader with over three decades of experience in AI-driven automation, enterprise systems, and software engineering research. He holds **25 patents** and has presented work at leading international venues including **MIT's STAMP Workshop, IEEE/ACM ICSE/ ICST, IISc, IIM , NIAS**, and universities across Europe and the US.

His work sits at the intersection of artificial intelligence, systems thinking, and philosophical foundations of knowledge, drawing from classical Indian logic and modern cognitive science to explore how emerging technologies reshape learning, reasoning, and human decision-making.

Mahesh is deeply committed to educational transformation and has been an advocate for **systemic approaches to learning design in the GenAI era**, integrating insights from epistemology, cognition, and socio-technical systems. He is known for making complex ideas accessible and for bridging academic insights with real-world impact.

As engineering challenges become increasingly complex and interdependent, the future of education must evolve beyond content delivery to cultivate engineering thinking—anchored in systems thinking, ethical reasoning, and purposeful innovation. This keynote reimagines teaching and learning ecosystems through the lens of complexity: preparing engineers not just to use AI, but to question, integrate, and shape it within socio-technical systems. By embracing interdisciplinary fluency, inclusive design, and a mindset of curiosity and responsibility, we can nurture engineers capable of leading transformative change across global contexts. In this AI-driven era, let us reimagine engineering education not merely as a pathway to technological advancement—but as a catalyst for cultivating engineers who can build a more just, sustainable, and inspired world. This keynote explores how we can design learning ecosystems for the AI era—environments where human wisdom and machine capability work together to help students engage more deeply, reason more clearly, and grow into reflective engineers ready to learn continuously and navigate an uncertain, complex world.