

LaCATODA 2024 Invited Talk

Erik Cambria

7 Pillars for the Future of AI

Abstract

In recent years, AI research has showcased tremendous potential to impact positively humanity and society. Although AI frequently outperforms humans in tasks related to classification and pattern recognition, it continues to face challenges when dealing with complex tasks such as intuitive decision-making, sense disambiguation, sarcasm detection, and narrative understanding, as these require advanced kinds of reasoning, e.g., commonsense reasoning and causal reasoning, which have not been emulated satisfactorily yet. The Seven Pillars for the future of AI address these shortcomings and pave the way for more efficient, scalable, safe and trustworthy AI systems.

Invited Speaker's Bio

Erik Cambria is a Professor at Nanyang Technological University, where he also holds the appointment of Provost Chair in Computer Science and Engineering, and Founder of several AI companies, such as SenticNet, offering B2B sentiment analysis services, and finaXai, providing fully explainable financial insights. Prior to moving to Singapore, he worked at Microsoft Research Asia (Beijing) and HP Labs India (Bangalore), after earning his PhD through a joint program between the University of Stirling (UK) and MIT Media Lab (USA). Today, his research focuses on neurosymbolic AI for interpretable, trustworthy, and explainable affective computing in domains like social media monitoring, financial forecasting, and AI for social good. He is ranked in Clarivate's Highly Cited Researchers List of World's Top 1% Scientists, is recipient of many awards, e.g., IEEE Outstanding Early Career, was listed among the AI's 10 to Watch, and was featured in Forbes as one of the 5 People Building Our AI Future. He is an IEEE Fellow, Associate Editor of various top-tier AI journals, e.g., Information Fusion and IEEE Transactions on Affective Computing, and is involved in several international conferences as keynote speaker, program chair and committee member.