

Department Vision

To be a center for academic excellence in the field of Computer Science and Engineering education to enable graduates to be ethical and competent professionals.

Department Mission

To enable students to develop logic and problem solving approach that will help build their careers in the innovative field of computing and provide creative solutions for the benefit of society.

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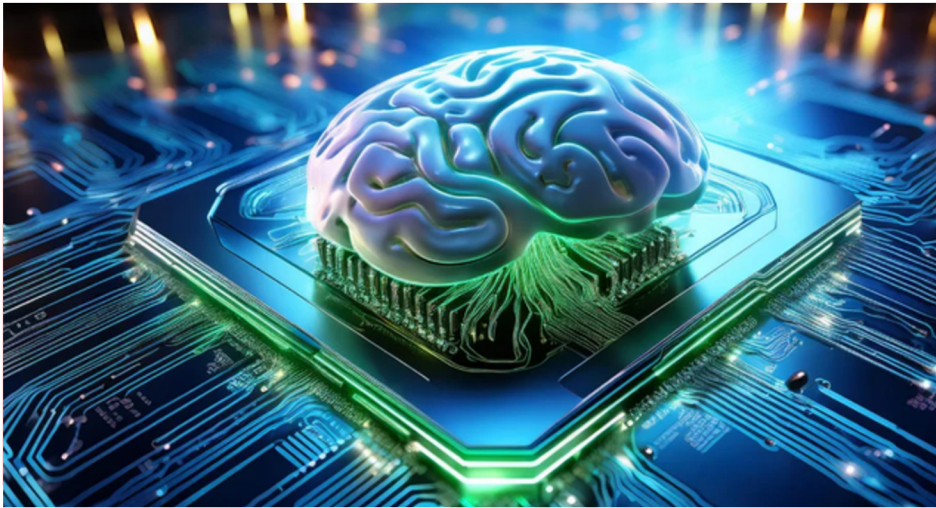
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AI Trust, Risk, and Security Management (AI TRiSM) is an emerging technology trend that will revolutionize businesses in the coming years. The AI TRiSM framework helps identify, monitor, and reduce potential risks associated with using AI technology in organizations – including the buzzy generative and adaptive AIs. By using this framework, organizations can ensure compliance with all relevant regulations and data privacy laws.

This technology trend helps detect potential risks associated with using AI models while also guiding how to mitigate those risks. (Just consider what ChatGPT means for cybersecurity.) By this, organizations can ensure that decisions are based on reliable data sources, leading to realistic and authentic outcomes for every process. According to Gartner, organizations that incorporate this framework into business operations of AI models can see a 50% improvement in adoption rates due to the model's accuracy.

Often, AI models can create unintended results, otherwise known as hallucinations, which can generate inaccurate output. This can have major consequences. For example, between 2016-2021, the AI system of the Dutch taxation authority incorrectly flagged thousands of families as committing welfare fraud. More recently, since 2022 when ChatGPT launched, several companies including Samsung have banned its use, along with other AI tools, after some employees mistakenly entered confidential information like source code in the chatbot. This led to security concerns that confidential data could be accessed by OpenAI. A poll conducted by Gartner showed 42% of respondents expressing privacy-related concern over the implementation of GenAI.



Neuromorphic computing, also known as neuromorphic engineering, is an approach to computing that mimics the way the human brain works. It entails designing hardware and software that simulate the neural and synaptic structures and functions of the brain to process information. According to the Queensland Brain Institute, neurons “are the fundamental units of the brain and nervous system.” As messengers, these nerve cells relay information between different areas of the brain and to other parts of the body. When a neuron becomes active or “spikes,” it triggers the release of chemical and electrical signals that travel via a network of connection points called synapses, allowing neurons to communicate with each other.



The ‘Augmented Connected Workforce’ concept integrates augmentation technologies into the work environments, empowering employees to improve their capabilities and productivity and enhance overall business processes and operations. AR is a fundamental technology used in the Augmented Connected Workforce concept, which enables interaction with the user's perception of the real world, overlaying digital information onto it. This digital content is fed using devices such as mobile phones, tablets, AR glasses, and headsets. Following are some ways AR technology is used to create an augmented connected workforce.



Extended reality (XR) is an umbrella term for the various technologies that enable us to enter immersive worlds. Encompassing a wide range of immersive technologies, XR connects all the human senses to fully engage the learner. As an overarching statement, XR places the learner in a fully or partially simulated, multi-sensory environment where they can learn in a way that's interactive, engaging, and memorable. It's a fully immersive, safe, scalable, and personalized experience for teaching all kinds of skills to a wide range of learners, from frontline workers in a retail environment to managers for whom soft skills like conflict resolution are invaluable.

As jobs change more rapidly than ever before, the ability to reskill workers quickly is becoming more and more important. In a recent survey conducted by Accenture, over 300 executives in five countries, including the U.S., were asked about their L&D investments in XR technology. The need for more effective training is clear and urgent. XR has become the frontrunner solution through which impactful enterprise learning and development objectives can be achieved.

From advancements in XR headsets with the latest releases from companies like Apple and Meta, to the potential being unlocked with the incorporation of artificial intelligence (AI), XR holds endless possibilities for more engaging and dynamic learning within the enterprise.

Breakout innovations across both hardware and software are just a part of why XR is poised to change the world of enterprise learning and beyond. In order to truly take advantage of the hardware advancements, enterprises must understand the important roles that content creation, device management, and secure distribution play in bringing XR to life at scale across their organizations.