



A Journey to MagicX: Insights and Experiences

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Exploring Extended Reality and Serious Games

On the last day of 2024, a few of my coursemates and I had the privilege of visiting MagicX (Media and Game Innovation Centre of Excellence) at UTM Skudai. This enriching experience provided valuable insights into the latest advancements in extended reality and 'Serious Games,' as described by Dr. Mohd Yazid Idris, MagicX's Director.

The goal of the visit was to expose us to cutting-edge technologies in development and to learn about MagicX's initiatives in driving innovation. We explored various virtual environments, including a nuclear sampling lab designed to train individuals in safely handling dangerous substances while minimizing costs.

A major highlight was trying out the Meta Quest, which provided an immersive virtual experience. The virtual environments were developed using Unity and Blender, showcasing the powerful tools behind realistic, interactive spaces. Additionally, we experienced a virtual biking system that utilized motion sensors to create a more engaging and realistic experience.

This trip provided a fascinating glimpse into the future of extended reality, blending creativity and technology to prepare individuals for real-world applications.

Issue Discussed: Virtual 3D Solutions and Digital Twin Systems



Digital Twin Systems

The trip also shed light on critical issues that can be addressed through virtual 3D solutions and the digital twin system. Virtual 3D technologies offer immense potential in industries dealing with high costs, safety risks, and complex processes.

For example, training for hazardous environments, such as handling nuclear materials, can be done in a virtual setting, reducing risks and expenses. These solutions are also invaluable in education, allowing students to gain hands-on experience in a risk-free environment.

The digital twin system takes it further by creating a virtual replica of physical assets or processes for real-time monitoring, simulation, and optimization. This technology is particularly useful in industries like manufacturing, healthcare, and urban planning, allowing for enhanced efficiency and predictive maintenance without disrupting operations.

These innovations not only improve productivity but also pave the way for safer, cost-effective, and more sustainable industry practices.

Reflection

The visit to MagicX was a truly eye-opening experience, especially as a student eager to enter the field of extended reality. Seeing the practical applications of technologies such as Unity, Blender, and motion sensors in creating immersive environments gave me a clear understanding of their potential.

What stood out most was how these technologies can address real-world challenges, from safe training environments to optimizing industry processes with digital twins. The seamless blend of creativity and technical expertise demonstrated during the trip inspired me to continue developing my skills in 3D design, programming, and problem-solving to contribute to this innovative field.

This trip reaffirmed my passion for becoming a part of the ever-evolving world of extended reality and immersive technologies. It was not just an educational experience but a glimpse into the future of technology.