

Navigating the Frontiers of Extended Reality and Immersive Experiences

An In-Depth Examination

Extended Reality (XR), a comprehensive term encompassing Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), has emerged as a paradigm-shifting technology with transformative potential across diverse domains. In this seminar, we delve into the intricacies of XR, exploring its technological foundations, applications, and implications for the present and future. We will elucidate the core components of XR and their individual characteristics by providing a nuanced understanding of how each technology augments or alters the user's perception of reality. We will then delve into the myriad of XR applications across industries, including healthcare, communication, education, training, product design, manufacturing, and beyond.

This one-hour seminar will be interactive and allows students to ask questions, participate in a quiz using their mobile phone, and even win prizes!



Yacine Merdjemek manages Application Development projects at Capgemini Government Solutions. With over two decades of experience in public, private, and academia, Yacine has a diverse background that has equipped him with a unique perspective on the challenges facing organizations in today's rapidly evolving technology landscape. Prior to Capgemini, Yacine worked as a Research Systems Programmer for the University Chicago, and as a Senior Software Engineer at Argonne National Laboratory.

In addition to his professional work, Yacine teaches graduate Computer Science and Physics courses at Saint-Xavier University, Lewis University, and Governors State University.

Yacine holds a doctorate degree in Physics from Conservatoire National des Arts et Métiers, Paris, a master's degree in Laser Physics from Ecole Polytechnique, Paris, a bachelor's degree in Theoretical Physics from University of Constantine, and a

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