The College of Engineering and IT (CEIT) at Al Ain University of Science and Technology (AAU), in conjunction with the IEEE UAE MTT and IM Joint Chapter and the IEEE AAU Student Branch, are cordially inviting all students, instructors, engineers, and researchers to attend the following IEEE technical talk:

- **Title:** Videos, Games, and Video Games: Research Challenges in Modern Video Systems
- **Speaker:** Shervin Shirmohammadi, Professor, University of Ottawa, Canada
- **Date / Time:** Sunday, May 08th, 2016 @ 18h:00
- **Venue:** Abu Dhabi Campus, Mohammed Bin Zayed City, goo.gl/maps/275y4GJGByH2

For registration and more information, please contact:
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ABSTRACT:

Video traffic on the Internet has reached unprecedented levels: not only the global Internet traffic itself has been growing by 21% annually, but also up to 90% of this traffic will be video by 2018. While the great majority of current video traffic is for traditional single-view 2D video, modern types of video that are coming to consumers, such as Ultra High Definition (UHD) video, multi-view video, tiled video, 3D video, and cloud gaming video, will make video processing and transport much more complex than its current state. Another layer of difficulty is added to the above when considering that the majority of consumers will access these videos not with traditional computers connected with wired networks, but with their mobiles devices such as smartphones or tablets. In fact, it is forecasted that by 2019 consumers will access the Internet by 11.5 billion such mobile devices. This creates hard challenges because of battery limitations, wireless access mode which has much wilder fluctuations than wired networks, and their different display and size characteristics.

In this talk, we will show specific examples of the above research challenges, and present solutions covering a wide range of systems, including HD Video Conferencing, 3D/Multiview video, video-on-demand, cloud gaming, mobile gaming, and mobile video.

BIOGRAPHY:

Shervin Shirmohammadi received his Ph.D. in Electrical Engineering from the University of Ottawa, Canada, where he is currently a Professor with the School of Electrical Engineering and Computer Science. He is Director of the Distributed and Collaborative Virtual Environment Research Laboratory, and an affiliate member with the Multimedia Communications Research Laboratory, doing research in multimedia systems and networks, specifically video systems, gaming systems, and multimedia-assisted healthcare systems. The results of his research, funded by more than $13 million from public and private sectors, have led to close to 300 publications, over 50 researchers trained at the postdoctoral, PhD, and Master's levels, over 20 patents and technology transfers to the private sector, and a number of awards. He is the Associate Editor-in-Chief of IEEE Transactions on Instrumentation and Measurement, Senior Associate Editor of ACM Transactions on Multimedia Computing, Communications, and Applications, an Associate Editor of IEEE Transactions on Circuits and Systems for Video Technology, and was an Associate Editor of Springer's Journal of Multimedia Tools and Applications from 2004 to 2012. Dr. Shirmohammadi is a University of Ottawa Gold Medalist, a licensed Professional Engineer in Ontario, a Senior Member of IEEE, and a Lifetime Professional Member of the ACM.