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Other - Redstick Speaker Series Talk

4K Video Streaming for Everyone**Manuel Tiglio, Universidad Nacional de Cordoba (Argentina)**Digital Media Center Theatre
February 14, 2020 - 03:30 pm**Abstract:**

Until rather recently, the video streaming industry has followed standard recommendations for bitrates and resolutions. That is, independent of the "complexity" of each video and scene. For instance, a black and white cartoon is encoded with the same rate as a complex, rich visual video with lots of texture, fast and slow motion, etc.

In this talk I will discuss results for an AI approach for encoding 1080 and 4K videos depending on their complexity, which results in considerable savings in a visually lossless sense: a factor of 2 in compression for 1080 and a factor of 10 for 4K. The latter implies that if this technology was widely adopted, around 85% of the world household population with internet would have access to 4K video streaming. The approach is non intrusive and coded agnostic. These results open the door for more complex streaming scenarios such 360, VR and AR, as well as 8K.

Speaker's Bio:

Tiglio received his Ph. D. in Physics from the Universidad Nacional de Cordoba (Argentina) in October of 2000, and he now is a faculty member there. He has had a number of postdoctoral, research, visiting scholar and faculty positions at Penn State, Louisiana State University, Cornell University, the University of Maryland, and Caltech. He also founded a startup technological company in California.

This lecture has refreshments @ 04:30 pm