



VIT-AP UNIVERSITY

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Advanced Digital Video Processing (A Value Added Course)

offered by

School of Electronics Engineering (SENSE)

Digital videos and images are used in wide variety of applications including industrial, consumer and many scientific applications. The Digital video processing and coding is one of the essential task for video streaming, video communications, video broadcasting and video storage applications. It is an ever growing technology as the multimedia content is ever growing in internet video. The current course focuses on various video compression algorithms and its coding tools and gives a practical approach in compressing raw video formats. The course also emphasizes on doing some mini projects on digital video compression algorithms.



Course Benefits :-

- * The students will be able to understand various concepts of digital video processing and blocks of digital video encoder and decoder
- * The students will be able understand various transform and quantization techniques and design a basic software based transformation and quantization for a digital video.
- * The students will be able to understand various algorithms of motion estimation, motion compensation and intra-prediction and will be implementing some algorithms for the same.
- * The students will be able to understand various filters used in video processing and will be able to design the filter algorithms for a digital video.
- * The students will be able to understand various entropy coding and decoding algorithms used in digital video compression and design & implement variable length and arithmetic coding/decoding algorithms.

EVERY MONDAY 03.00 PM to 05.00 PM

Commence from 21-02-2022.

Certificate after completion of course

Instructors : Dr. Purnachand Nalluri & Dr. Ravindra Dhuli