



Can I see Batman vs. Superman  
in my home tonight on Demand?  
*A Gentle Introduction to Video Compression*  
Speaker, Ray Duran, Extron Electronics

Mar 2, 2016 at 6:30 pm

Location: California Lutheran University, Swenson 101

Meetings are free and open to the public

RSVP [at this link](#)

<http://videocompression.eventbrite.com>



Videos take up a lot of memory space, about 17MB per second from a camcorder video. When shared across a network with a system that needs to stream the tape in real time, the video must be compressed by the sender and restored by the receiver. The talk will be about the technology, and the engineering and basic math of streaming video. In particular, the speaker will introduce the basics of JPEG-2000 equivalent video compression.



**Ray Duran** is a Principal FPGA Design Engineer at Extron Electronics. He has 25 years of engineering experience in the field of programmable devices and has become an expert in the design, development and programming of very high speed digital signal processing chips for applications requiring the management of high data throughput and rapid analysis such as video and military based systems with intense computing analysis. Ray graduated with a BSEE degree from the California State University Fresno in 1988. He recently obtained a master's in engineering from UCLA in 2014.

**Location:** California Lutheran University  
Swenson 101  
141 Faculty Street, Thousand Oaks  
Pizza/networking starts at 6:30 pm  
Talk starts at 7:00 pm

**Our sponsors**  
California Lutheran University  
IEEE Buena Ventura Section



**Directions from Ventura:**

Take the Ventura Freeway 101 South.  
Take Lynn Road Exit, turn left, drive 2.9 miles.  
Lynn Road turns into Olsen Road, drive .9 miles.  
Turn right onto MountClef Boulevard - the University is on the right  
Turn Right onto Faculty Street  
Park on Faculty Street or adjacent streets.  
Visitors may park on the streets after 7 pm without a permit.  
Important: do not park in the spots marked "Homeowner Parking only".  
Before 7 pm, we recommend to park in the G lot on the southwest corner of Olsen and MountClef and walk to the Swenson building.

**Directions from Los Angeles:**

Take the Ventura Freeway 101 North.  
Take Lynn Road Exit, turn right, drive 2.9 miles.  
Lynn Road turns into Olsen Road, drive .9 miles.  
Turn right onto MountClef Boulevard - the University is on the right.  
Turn Right onto Faculty Street

**CLU STREET PARKING**

**PERMIT**

**IEEE-RAS-IA MONTHLY  
MEETING**

**THIS VEHICLE IS AUTHORIZED TO PARK ON ANY CLU STREET BEFORE 7 PM ON ANY WEDNESDAY EVENING OF THE MONTH IN CONNECTION WITH THE IEEE-ROBOTICS AUTOMATION/INDUSTRIAL APPLICATIONS MEETING ON THE CLU CAMPUS.**

**NAME:** \_\_\_\_\_

**LICENSE PLATE:** \_\_\_\_\_

**CONTACT PHONE NUMBER:** \_\_\_\_\_

**CURRENT DATE:** \_\_\_\_\_

**Fred Miller  
Director of Campus Public Safety  
(805) 493-3960**