

# DL Tour in the Sacramento Chapter

DL's Name: Zuqing Zhu  
Time: 12:00pm, on Mar. 18, 2018  
Location: Kemper Hall Room 1131, University of California, Davis  
Local hosts: Prof. Biswanath Mukherjee and Prof. Massimo Tornatore  
Title: AI-Assisted Multi-Layer Restoration in a Software-Defined IP-over-EON  
Cost to ComSoc: Zero, since this trip was combined with Dr. Zhu's business trip to San Diego.

## Talks abstract:

In this talk, we first analyze the congestion-avoidance recovery requirements in multi-layer IP over Elastic Optical Networks (IPoEONs). Then, by leveraging software-defined networking (SDN), we explain how to design a software-defined IPoEON (SD-IPoEON) that can satisfy such requirements effectively. How to realize the design with a prototype implementation is also discussed. Finally, we show experimental results to confirm that with the precise prediction from an artificial intelligence (AI) module based on deep learning, our system can achieve congestion-avoidance recovery in IPoEONs with cross-layer orchestration.

## Brief report on the talk:

The talk lasted for around 30 minutes, and was followed by a fruitful 10-minute discussion on the topic. There were around 20 attendees, including faculty members, researchers, and graduate students. The talk was well received.

## Pictures taken at the talk:



