



## CEE 595 – Geotechnical Engineering Seminar

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Friday, March 16, 2018  
11:00AM, Newmark Lab 3310

### The Role of Case Histories in Geotechnical Engineering

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#### Abstract

Case Histories have always played a strong role in geotechnical engineering. They have been an essential means for:

- Improving our understanding of various phenomena.
- Calibrating analytical procedures.
- Designing and interpreting physical model tests.
- Developing semi-empirical procedures

Under static as well as during earthquake and post-earthquake loading conditions.

This presentation will include case histories relevant to earthquakes.

Case histories that have proven to be particularly valuable will be presented and the key features and lessons learned will be examined. These case histories will include: (i) cases where liquefaction was triggered in past earthquakes; and (ii) landslides in Anchorage from the 1964 great Alaska earthquake.

Cases discussed as part of (i) provide insights gleaned regarding triggering of liquefaction in cohesionless soils with emphasis on CPT-based procedures for assessing liquefaction potential. Cases discussed as part of (ii) provide insights regarding the behavior of lightly to moderately over-consolidated cohesive soils during earthquakes.