



Earthquake Engineering Research Institute



Annual Report

Academic Year 2007-2008

Table of Contents

Introduction	1
General Chapter Information.....	1
Officers	1
Members	1
Website.....	2
Chapter Events.....	2
Kickoff Meeting (September 27, 2007)	2
Seminars	3
Sigmund A. Freeman (February 11 th 2008).....	3
Dr. Annie Kammerer (March 17 th 2008).....	3
Outreach Activities	4
EERI Booth at Engineering Fall Gathering (August 28 nd 2007)	4
Figure 3: EERI Booth at the Engineering Fall Gathering	4
Participation in Explore UT (March 1, 2008)	4
Undergraduate Seismic Design Competition.....	7
Summary	8
Acknowledgements.....	8



Introduction

The Student Chapter of the Earthquake Engineering Research Institute (EERI) at the University of Texas (UT) at Austin (hereafter referred to as “the Chapter”) serves to further the mission of EERI mainly by disseminating knowledge about earthquakes, their effects, and how to mitigate earthquake hazards. To this end, the Chapter organizes seminars, outreach activities, and encourages the student body to join EERI. The Chapter was founded in 1992 and has been continuously active since then. In the following report, we present information about the membership in the chapter and its activities in the 2007-08 academic year.

General Chapter Information

Officers

President	Albert Kottke (albert@mail.utexas.edu)
Vice-President	Sezgin Kucukcoban
Treasurer	Ali Abu Yousef
Secretary	Gokhan Saygili
Faculty Advisor	Dr. Ellen Rathje
Local Contact Member	Mr. David Teasdale of Haag Engineering, Dallas

Members

EERI Member ID	Name (Last, First)
11311	Abu Yousef, Ali
8736	Agarwal, Puneet
11543	Alvear, Ariana
11314	Carr, Lucas
11315	Crummett, Justin
11506	Hart, Andrew
11516	Homer, Matthew
10783	Howell, Rachelle
11312	Kang, Jun Won
11505	Kim, Dony Hyun
9893	Kim, Insung
9984	Kottke, Albert
11313	Kroncke, Mark
9917	Kucukcoban, Sezgin
10327	Morovat, Mhommed Ali
10328	Park, Kwangsoo



11472	Rush, Ryan
10797	Saygili, Gokhan
11512	Scales, Martin
11542	Wilkinson, Michelle
11471	Womble, Ty

Website

The Chapter hosts a website on the official University of Texas student organizations domain. The address is: <http://www.engr.utexas.edu/eeri/>. The website was designed and maintained by Sezgin Kucukcoban for the previous year.

Chapter Events

Kickoff Meeting (September 27, 2007)

The first activity of the Chapter for the year 2007-08 was the General Introductory Meeting aimed at introducing the student body to EERI and the student chapter at UT. In the meeting, the EERI president, Albert Kottke, introduced EERI's goals and past activities. The Chapter provided pizzas and drinks to the attendees. EERI Membership forms were also distributed at the meeting.



Figure 1: Albert Kottke introducing EERI at the Kickoff meeting.



Seminars

The Student Chapter organized two seminars by experts in earthquake engineering. The seminars were able to represent a wide range of earthquake engineering activities including geotechnical, offshore, and building design. The chapter gratefully acknowledges support from EERI and the Freidman Family Visiting Professionals Program. Brief details of each seminar are presented below.

Sigmund A. Freeman (February 11th 2008)

Sigmund Freeman, a Principal of Wiss, Janney, Elstner Associates, Inc. (WJE), travelled to Austin as part of the Friedman Family Visiting Professionals Program and gave a presentation entitled “Effects of Earthquake Loading on Buildings.” The presentation included a brief introduction to Mr. Freeman’s 40 years of experience in the field of earthquake engineering followed by a discussion of the relationship of earthquake building code criteria to structural dynamics and the development of performance based structural engineering. Following the presentation, there was a well-attended reception in which students were able to ask Mr. Freeman questions in depth.



Figure 2: Professor Ellen Rathje introducing Annie Kammerer from the Nuclear Regulatory Commission.

Dr. Annie Kammerer (March 17th 2008)

Dr. Annie Kammerer is a seismologist and earthquake engineer in the Office of Research of the US Nuclear Regulatory Commission, where she coordinates and acts as project manager for the seismic and tsunami research programs. In her presentation to the Chapter, Dr. Kammerer first provided an overview of the NRC and the new regulations and guidance that have been developed for new reactors. Dr. Kammerer then discussed several key research projects such as new probabilistic seismic and

tsunami hazard assessment tools and sources, the incorporation of incoherency into soil-structure-interaction analyses, and the full integration of site response analyses into PSHA.

Outreach Activities

The Chapter participated in several outreach activities directed towards both the university community as well as the local public to spread awareness of EERI and earthquake engineering. Brief details of these activities are presented in the following section.

EERI Booth at Engineering Fall Gathering (August 28nd 2007)

The Engineering Fall Gathering is an annual event organized by the UT College of Engineering. The event takes place in the first week of the fall semester. The event is open to all engineering students, and is aimed at introducing new students to organizations and activities on campus. The Chapter set up a booth at the Engineering Fall Gathering and informed the students about the activities EERI and benefits of membership.

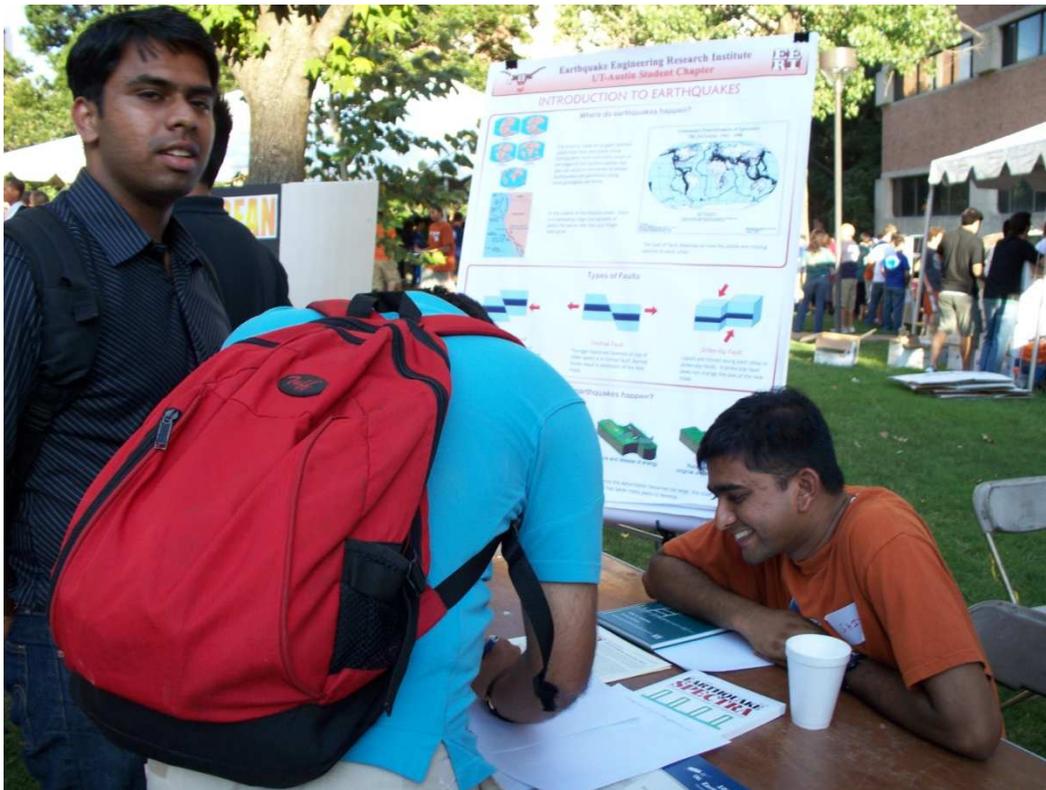


Figure 3: EERI Booth at the Engineering Fall Gathering

Participation in Explore UT (March 1, 2008)

Explore UT is an open house organized by the university. It is a major university-wide outreach event attracting the general public, especially primary, middle and high school students. EERI set up a booth at Explore UT. As part of our new outreach program we constructed a simple shake table and let the kids build buildings out of toothpicks and marshmallows (to simulate steel buildings) or peanut butter and sugar cubes (to simulate masonry buildings) and shake them on the table. We also had 5 posters



describing Earthquakes, Earthquake Safety, Geotechnical Hazards, Historical Earthquake Damage, and How Earthquakes Affect Buildings. The kids really enjoyed this event and we plan to expand the outreach program to include trips to local schools.



Figure 4: A participant at Explore UT builds a structure out of tooth picks and marshmallows.



Figure 5: Kids building miniature buildings at Explore UT.



Figure 6: Kids and parents watch the buildings shake on simple shake table.



Undergraduate Seismic Design Competition

The 2007-08 academic year was the second year that UT participated in the undergraduate seismic design competition held by EERI. A group of undergraduate students: Ty Womble, Matt Homer, Ryan Rush, Martin Scales, Michelle Wilkinson, Andrew Hard, Dong Kim, Ariana Alvear, and Harold Gaskill, constructed and tested their building at the competition. UT had a great time at this competition and placed 2nd for their efforts. They plan to compete again this year.



Figure 7: A portion of the undergraduate seismic design team at the annual meeting.



Summary

In summary, the 2007-08 academic year was a productive year for the EERI UT Austin Student Chapter. The Chapter endeavored to further the mission of EERI by means of seminars and outreach activities. Our seminars highlighted many different aspects of earthquake engineering and our outreach activity at Explore UT achieved great success and we plan to further it in years to come. The Chapter encouraged students to become the members of EERI. The student members of EERI, as well as the general student body, actively participated in the events hosted by the Chapter.

Acknowledgements

The Chapter gratefully acknowledges the effort of all the chapter officers and volunteers who helped in organizing various events throughout the year. Also, the Chapter thanks individual faculty members in the UT Department of Civil Engineering for helping with the seminars.