FRIEDMAN FAMILY VISITING

Professionals Program



Visit to Stanford University: February 24th, 2023

This report summarizes the visit of **Ramin Golesorkhi** from Langan that took place at Stanford University on February 24th, 2023.

ITINERARY

TIME:	ACTIVITY:
12:30 PM – 1:30 PM	Student Chapter meets & welcomes Visiting Professional to campus over lunch
1:45 PM – 2:30 PM	Round table discussion with Dr. Golesorkhi about his career, working in industry, unique projects he has worked on, and other topics. Event was open to all EERI student chapter members
2:30 PM - 3:00 PM	Break Before Lecture
3:00 PM - 4:00 PM	Friedman Family Visiting Professional Lecture, followed by Q&A session
4:00 PM - 5:00 PM	Post-Presentation Reception

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S): Mia Lochhead, President: mlochhea@stanford.edu and Lewis Nolf, Vice President: nolf@stanford.edu

- Peter Lee, Outgoing President: jlee6925@stanford.edu
- Annie Helmes, Activities Coordinator: ahelmes@stanford.edu
- Alanna Joachim, Treasurer: ajoachim@stanford.edu
- Elyse Pollack, Alumni Coordinator: epollack@stanford.edu
- Katrina Springer, Media Chair/Historian: katrina4@stanford.edu
- Sagar Tripathy, Secretary: sagarstr@stanford.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

Dr. Golesorkhi's lecture focused on the development of site-specific time series for performance-based design applications, as well as some limitations in the development of these time series. The professional lecture was the best-attended portion of the day's schedule, with over 35 students, post-docs, and professors in



attendance. A photo of the presentation is included here, and additional photos are included in the descriptions of the supplemental events.

Lecture Abstract

Development of Site-Specific Time Series for Performance-Based Design – Art or Science?

Recent seismic design codes focus on Performance-Based Design (PBD), which is a methodology that allows for design flexibility and opportunities for enhanced structural performance and innovation. Nonlinear time series evaluations and analyses are an integral part of PBD. As such, development of site-specific time series is an important part of PBD. This talk discusses the selection, methods of development, advantages and disadvantages of different methods, and some of the issues with the development of site specific time series.

Professional Bio

Dr. Ramin Golesorkhi is a Principal/Vice President at Langan's San Francisco office, where he serves as the Director of Seismic Engineering Services. He has over 30 years of work experience doing seismic analyses and foundation engineering, and has experience working on projects around the world, including the United States, Central and South America, India, and the Middle East.

Dr. Golesorkhi attended Tufts University in Boston, where he received both his Bachelor of Science and Master of Science Degrees, then he later attended the University of California, Berkeley, where he received his PhD. Since then, his work has contributed to the development of seismic and geotechnical design criteria for many types of buildings and infrastructure, including industrial, residential, government, office, hospitals, bridges, freeways, base-isolated structures, tunnels, and more. Furthermore, he is a primary author of the Council of Tall Buildings and Urban Habitat Technical Guide on Performance-Based Seismic Design for Tall Buildings (2017).

Supplemental activities

Lunch with Dr. Golesorkhi and Stanford Faculty



The first event of the day was a lunch with Dr. Golesorkhi and members of the Stanford Structural Engineering and Mechanics (SEM) Faculty. Other than enjoying a nice meal, the primary goal of the lunch was to provide Dr. Golesorkhi an opportunity to meet the board members of the EERI Student Chapter as well as members of the SEM faculty in a more casual context. During this time, the board members of the EERI Student Chapter discussed their career goals, goals for the direction of the EERI student chapter, as well as how to generate interest in the undergraduate civil engineering program at Stanford.

Round Table Discussion

The second event of the day was a round table discussion. This event was open to all Structural Engineering, Geophysics, and Sustainable Design and Construction students. The goal of this event was to offer Stanford students an opportunity to speak with Dr. Golesorkhi and ask him questions regarding his many areas of expertise. The topics discussed included the development of site-specific time series, Dr. Golesorkhi's experiences at Langan, consulting, business practices, as well as general advice for aspiring engineers. This event directly preceded Dr. Golesorkhi's lecture.

Reception

The final event of the day was a reception. This event took place directly after the lecture and provided attendees with refreshments on the terrace of the Civil and Environmental Engineering building. The intention of this event was to provide the attendees of the lecture an opportunity to speak with Dr. Golesorkhi more casually and to discuss with one another about the material covered in Dr. Golesorkhi's lecture.



RESULTS, FEEDBACK AND LESSONS LEARNED

The following points summarize a few of the key challenges, future plans, and lessons learned from this year's event.

• The biggest challenge faced in this visit was encouraging attendance for the various events throughout the day. Stanford doesn't have a geotechnical engineering program, and thus, the majority of the target audience were structural engineering students, not geotechnical engineering students. Since Dr. Golesorkhi is a geotechnical engineer, it was slightly harder to recruit people. The EERI Chapter tried to

- overcome this by inviting the Geophysics students, as well as the Sustainable Design and Construction students.
- Last year, the lecture was held in conjunction with the Structural Engineering and Geomechanics seminar (CEE 298), which provided a solid platform for securing a large lecture hall and boosted attendance. This year, the Stanford EERI Chapter was not able to host the Friedman Lecture as part of the CEE 298 seminar, which made it more difficult to reserve space and encourage attendance. The Stanford EERI Chapter was able to include this lecture as an opportunity for a Make-Up Seminar for the CEE 298 course, but implementing it into the schedule would have improved the turnout. The Stanford EERI Chapter recommends that the Friedman Family Visit is hosted in conjunction with the CEE 298 seminar in future years.
- The post-presentation reception provided a good opportunity for the general student audience to engage with Dr. Golesorkhi, which would not have been possible in the small-group dinner format, which the Stanford EERI Chapter has used in the past. The Stanford EERI Chapter aims to host similar receptions for future Friedman Family Visits.

ACKNOWLEDGEMENTS

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LIST OF ATTACHMENTS

The following is an email attachment that was sent to all students and faculty in the Stanford Structural Engineering and Mechanics program advertising the Friedman Family Visiting Professional Lecture. This flier was also distributed to the Sustainable Design and Construction students, as well as the Geophysics students. The email also included a link to sign up for the round table discussion. The event was also posted on our EERI Student Chapter website.

