

FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

Visit to University at Buffalo: Friday, April
05, 2024



This report summarizes the visit of **David Cocke** from Structural Focus that took place at the University at Buffalo on April 05, 2024,

ITINERARY OR AGENDA

Provide the itinerary of the visit. For example:

TIME:	ACTIVITY:
Thursday, 7 PM	Dinner with ASCE & EERI Undergraduate student chapter leaders
9:00 AM – 9:30 AM	Meet with chair of Civil, Structural & Environmental Engineering (CSEE) Department (Dr. Rabideau).
9:30 AM – 10:45 AM	Tour of Structural Engineering and Earthquake Simulation Laboratory (Students can discuss/present their projects)
11:00 AM – 12:30 PM	Seminar on Projects worked on with Structural Focus
12:30 PM – 2:00 PM	Lunch with graduate student leaders
2:00 PM – 2:30 PM	Meeting with undergraduate seismic design team
2:30 PM – 3:30 PM	Graduate student presentations on current projects.
3:30 PM – 4:00 PM	Break
4:00 PM – 5:00 PM	Speed Interviews / Small group discussions
6:30 PM	Dinner with CSEE faculty

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S): John Keeffe, SDC Team Member, johnkeef@buffalo.edu

- Tuan Le, UB Seismic Design Team Leader, tale@buffalo.edu
- Andreas Stavridis, Graduate Student Coordinator, astavrid@buffalo.edu
- Jesse Orozco, UB ASCE President and helped promote for event, jesseoro@buffalo.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

The presentation began with David Cocke talking about his history as an engineer; where he went to school, why he moved to California, his work as a structural engineer in San Francisco, and founding of his company, Structural Focus. After this, he spoke about three different projects he worked on with Structural Focus: The Anaheim Citrus Packing house, The Huntington Library, and The Netflix Egyptian Theater. He spoke about what made these projects unique, what challenges they faced, and how they made something impressive. For example, one challenge was with The Huntington Library was that the necessary retrofit for seismic design would end up being much more extensive than originally thought due to how it contained a priceless collection of historical literature. Finally, David finished with tips for all the younger members attending the presentation based on his experience working as a professional engineer. He gave insight on what it means to be a professional engineer, and how to succeed in the real world. The presentation had close to 40 attendees, which consisted of a mix between department faculty, graduate, and undergraduate students. The reception of the presentation was very positive, with several members of the audience asking questions about his work as a professional engineer, any specific project challenges he may have faced, and other topics relating to structural and seismic engineering.



Lecture Abstract

The presentation began with David Cocke talking about his history as an engineer. Following this, he spoke about different projects that he worked on at his company, Structural Focus. The presentation ended with tips to future engineering students attending the presentation based on his experiences working as a professional engineer.

Professional Bio

David Cocke founded Structural Focus in 2001, following a career already consisting of more than two decades with a structural engineering firm in San Francisco. He got his Bachelors of Science in Structural Engineering at Virginia Tech and his Masters of Science in Structural Engineering at San Jose State University. He is a licensed engineer in eleven different states and has expertise in structural and seismic engineering work. David has served on several leadership boards during his time as a professional engineer, such as the President

of ASCE's Structural Engineering Institute and the Earthquake Engineering Research Institute. His work focuses on preserving historical buildings, with a focus on the more challenging projects.

SUPPLEMENTAL ACTIVITIES

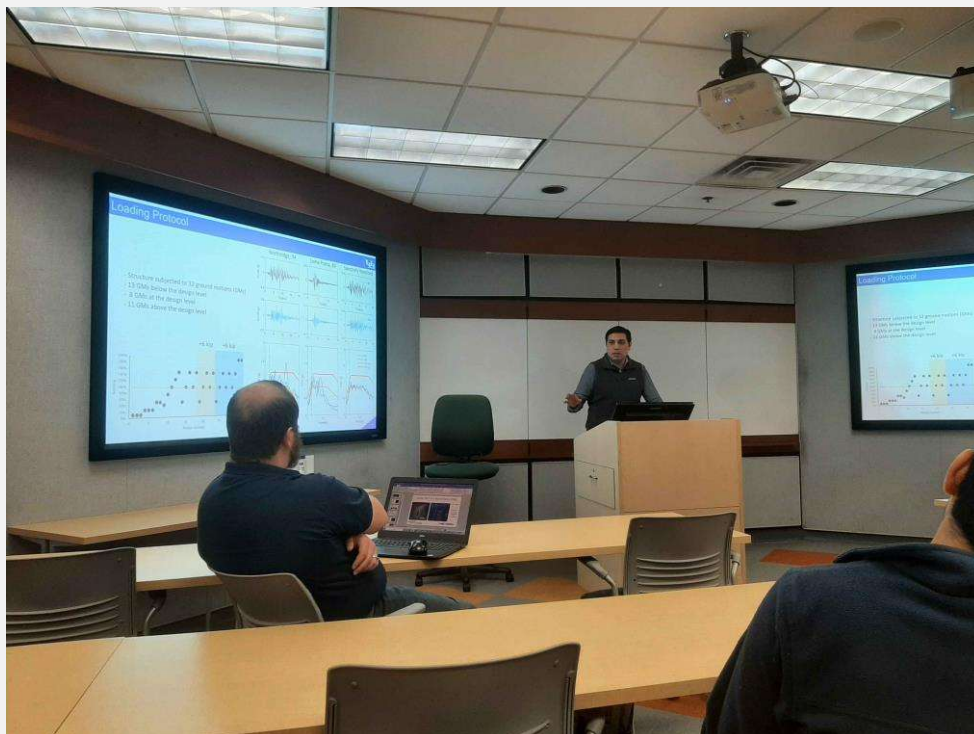
Meeting with undergraduate seismic design team

This meeting allowed the undergraduate seismic design team to prepare for the seismic design competition, which was only in a few days. The meeting consisted of about 14 members of the team (everyone who could attend and was going to the competition) and David Cocke. Our design team leaders (Tuan Le, Denver Liberty, Jacob Liberati, and Mac Klatte-Mcafee) gave a presentation they were preparing for the competition. The team received pointers on our presentation and what last-minute changes we could make to improve our team.



Graduate Student Presentations

Four members of the graduate student section gave presentations on what projects they were working on over the past several weeks. David Cocke, members of the graduate faculty section, and other graduate students sat in attendance. Following the presentations, questions were asked about the presentations.



Speed interviews / small group discussions

During this time, participating students could either attend speed interviews with David Cocke or participate in a roundtable-esque discussion about working as a professional engineer and engineering research. This was primarily attended by graduate students. These students were able to get pointers and support each other for their future endeavors.

RESULTS, FEEDBACK AND LESSONS LEARNED

Brief description of challenges during the process, general reception of the program and Visiting Professional. Also, a description of other topics or disciplines the Student Chapter would like to cover in future visits, and related goals.

- We had to plan additionally with another student chapter which made it a bit difficult as we wanted everything to be done in one trip. This was also hard because the University of Toronto operates on a trimester schedule while the University at Buffalo operates on a semester schedule. Additionally, the deadline for planning the itinerary was very early which was hard to manage, as the entire time between receiving word that UB had been accepted for the program and the due date for the plan was over our winter break, so we could not meet with faculty in person.
- The undergraduate seismic design team really enjoyed the visit. Our design team leaders said they got a lot of good feedback after their mock presentation, several graduate students were interested in the program and seem to be more interested in EERI, and there was a great variety of attending participants to the general seminar.
- A structural engineering focus works well for the University at Buffalo, especially with such a strong seismic engineering influence. The earthquake shake table is a great way for students to conduct research relating to the seismic field, so having visitors whose work can also reference the type of research we conduct is fantastic.

ACKNOWLEDGEMENTS

The University at Buffalo EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of David Cocke through their Friedman Family Visiting Professional Program endowment.

Thank you for your consideration for this program; it was incredibly rewarding to the students.

LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

N/A (I did not receive a presentation copy).