Re: ASE & EOS Seminar Series on 22 August 2023 (Tuesday), 1.30PM (GMT)

David Lallemant (Asst Prof) <dlallemant@ntu.edu.sg>

周二 2023/8/22 20:56

收件人:#HOU WENLONG# <HOUW0004@e.ntu.edu.sg>

Hi Wenlong,

Great to see you at the seminar. I am happy to endorse.

Best, David

On 22 Aug 2023, at 4:09 PM, #HOU WENLONG# <HOUW0004@e.ntu.edu.sg> wrote:

Dear Prof. Lallemant,

May I have an email endorsement for attending this seminar?

All the best, -Wenlong

发件人: David Lallemant (Asst Prof) <dlallemant@ntu.edu.sg>

发送时间: 2023年8月16日 15:53

收件人: Pan Tso-Chien (Prof) < CPAN@ntu.edu.sg>

抄送: Lo Yat-Man, Edmond (Assoc Prof) < cymlo@ntu.edu.sg>; #HOU WENLONG#

<HOUW0004@e.ntu.edu.sg>; Gizem Mestav Sarica

<gizem.mestav.sarica@aon.com>; #RABONZA MARICAR LABALAN#

<MARICARL001@e.ntu.edu.sg>; Lim Hwei Li <HweiLi@ntu.edu.sg>

主题: Re: ASE & EOS Seminar Series on 22 August 2023 (Tuesday), 1.30PM (GMT)

Hi TC

Too bad that you will not be here during Henry's visit. Let me know when you are back, as it would be great to catch up. Also is there a particular email for the ETH-SG Future Resilient Systems program that I could forward the announcement to?

Dear Hwei Li: let me know if you need any other info to share the announcement with ICRM.

Kind regards, David

On 16 Aug 2023, at 10:32 AM, Pan Tso-Chien (Prof) < CPAN@ntu.edu.sg> wrote:

Dear David,

Thank you for the seminar information which Hwei Li (in Cc) would help distribute to ICRM colleagues. Henry's work on distributed systems is indeed very interesting. I had an occasion talking with someone who had worked with him while discussing over China's major Wenchun Earthquake.

Unfortunately, I'll be away while Henry is on our campus and shall miss his seminar. However, if you have recording of his talk, I will be interested in viewing it.

Best,

David

From: David Lallemant < dlallemant@ntu.edu.sg>

Date: Tuesday, 15 August 2023 at 17:11

To: T-C Pan < CPAN@ntu.edu.sg, Edmond Lo

<cymlo@ntu.edu.sg>, Wenlong Hou <HOUW0004@e.ntu.edu.sg>,

Gizem Sarica <<u>gizem.mestav.sarica@aon.com</u>>

Cc: #RABONZA MARICAR LABALAN#

<MARICARL001@e.ntu.edu.sg>

Subject: Fwd: ASE & EOS Seminar Series on 22 August 2023

(Tuesday), 1.30PM (GMT)

Dear TC, Edmond, Wenlong, Gizem,

Hope the semester is off to a great start for you! My friend and colleague Henry Burton from UCLA is visiting all next week. Sharing below information on his seminar happening next Tuesday Aug 22nd at 1:30pm, related to earthquake risk and resilience analysis of distributed systems. Henry's research is super interesting, so please feel free to join the seminar, and share the seminar info with your colleagues who might be interested.

In addition, let me know if you would like to schedule a separate meeting with Henry. Currently his schedule for next week is quite open. Kind regards,

Begin forwarded message:

From: ASE & EOS Seminars < ASE EOS.seminars@ntu.edu.sg> Subject: ASE & EOS Seminar Series on 22 August 2023 (Tuesday), 1.30PM (GMT)

Date: 14 August 2023 at 12:10:28 PM SGT

Cc: "Edward Park (Asst Prof)" < edward.park@nie.edu.sg, "Kim Hie Lim (Asst Prof)" < HLKIM@ntu.edu.sg, "Kelly Andersen (Asst Prof)" < kelly.andersen@ntu.edu.sg, "Zita Koh Saw Khim (Jacqueline)" < JSKKoh@ntu.edu.sg

<image001.png>

Seismic Risk and Resilience Modeling of Distributed Infrastructure Systems

Assoc. Prof. Henry V. Burton
Department of Civil and Environmental Engineering,
University of California, Los Angeles

Abstract: This presentation will discuss some recent advancements in seismic risk and resilience modeling of distributed infrastructure systems. First, an end-to-end simulation framework to evaluate postearthquake functional loss and restoration of a water system is developed, which encompasses seismic hazard component characterization, damage, hydraulic performance, and network restoration modeling. The modeling framework is validated using data from the 2014 South Napa Earthquake and extended to a hypothetical scenario. To deal with the temporal complexities that are embedded in the post-earthquake restoration process, a general dynamic updating framework is developed to reduce uncertainties in the outcomes of post-event recovery forecasts using Bayesian Inferencing, by exploiting real-time data. The specific example of updating post-earthquake functional forecasts presented recovery is validated on a real pipe network (Napa water system) and event (2014 earthquake and recovery). The end-to-end framework is then extended to enable stochastic event set assessments of the water network using the UCERF2 earthquake rupture forecast model. Given that evaluating a large set of events with end-to-end simulation modeling is computationally expensive, a framework that uses active learning to select a subset of ground motion maps and associated occurrence rates that reasonably estimates the water network risk is also developed.

<image002.jpg>**Bio**: Dr. Henry V. Burton an Associate Professor and Presidential Chair in Structural Engineering the Department of Civil and Environmental Engineering at the University of California, Los Angeles. His research is directed towards understanding and modeling the relationship between the performance of infrastructure systems within the built environment, and the ability of

communities to minimize the extent of socioeconomic disruption following extreme events. Dr. Burton is a registered structural engineer in the state of California. Prior to obtaining his PhD in Civil and Environmental Engineering at Stanford University, he spent practice at Degenkolb vears in Engineers, where he worked on numerous projects involving design of new buildings and seismic evaluation and retrofit of existing buildings. He is a recipient of the **National** Science Foundation Next Genera□on of Disaster Researchers Fellowship (2014) and the National Science Foundation CAREER Award (2016).

Topic: ASE & EOS Tuesday Seminar Meeting Time: 22 August 2023 1:30 PM Singapore,

TUESDAY

Venue: N1.1-B2-01C

<u>Virtual</u>
Join Zoom Meeting
https://ntu-sg.zoom.us/j/89006181211

Meeting ID: 890 0618 1211

Passcode: 883807

<u>Upcoming Seminars and Talks at ASE & EOS - block your calendars!</u>:

22 August 2023 @ 1.30PM Assoc.
 Prof. Henry Burton, UCLA
 Hosted by David Lallemant

29 August 2023 Asst. Prof.
 Remi Luo, National University of Singapore - Geography

Hosted by Kelly Anderson

- 6 September 2023 (Wednesday) Asst. Prof. Fiona Williamson, Singapore Management University Hosted by
- 12 September 2023 Dr. Charlotte Chang, Asian School of Environment, NTU Hosted by Janice Lee
- 19 September 2023 Dr. Chen Mengli, National University of Singapore, TMSI Hosted by Wang Xianfeng
- 26 September 2023 Dr.
 Alessandro Ponzo, large Marine Vertebrates Research
 Institute, Philippines
 Hosted by Kim Hie Lim
- 3 October 2023 (Recess week)

 Lin, Academia Sinica, Taiwan

 Hosted by Yun, SangHo

 Asst. Prof. Nina
- 10 October 2023 RECESS WEEK OFF
- 17 October 2023 AVAILABLE
- 25 October 2023 (Wednesday) Prof. Paul Kench, NUS Hosted by Kyle Morgan
- 31 October 2023 Assoc. Prof.
 Lian Feng, SUSTech, China
 Hosted by Edward Park
- 6 November 2023 Assoc. Prof.
 Michael Gumert, SSS/ASE, NTU
 Hosted by Emma Hill
- 14 November 2023 LAST WEEK OFF

Gentle reminder, kindly use the following contacts for scheduling seminars and talks:

ASE & EOS Seminar Series (Tuesdays) — for scheduling, contact Kelly, Hie Lim, Edward or Jacqueline through this email: <u>ASE_EOS.seminars@ntu.edu.sg</u>

Friday Talks — even though Friday Talk announcements are sent from this account, please contact Jacqueline Koh directly for scheduling.

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Towards a sustainable earth: Print only when necessary. Thank you. <image002.jpg><image002.jpg>