Monthly OpenSees Webconferences

Objective: To provide a place where researchers can share the OpenSees-related work they are doing to the QuakeCoRE research community, where we can hold presentations about OpenSees topics of interest, and to generally facilitate collaboration and sharing between students and faculty working with OpenSees.

PLEASE NOTE: Any presentation slides below are the author's property. They may contain unpublished or preliminary information and should only be used while viewing the talk.

08 August 2017 9:00-10:00am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- OpenSeesRetainWall2D GiD problem type for analysis of retaining structures in 2D and other pre/post-processing tools (McGann)
    - Questions/Discussion (**All**)
- Parallel Algorithms for Conducting IDA and MSA using OpenSees (Reagan Chandramohan)
    - Questions/Discussion (**All**)

Action Items: None

Participants: Chris McGann (UC), Reagan Chandramohan (UC), James Maguire (Wollongong/UA), Samuel Roeslin (UA), Seokho Jeong (UC), Liam Wotherspoon (UA), Arman Kamalzadeh (UA), Luke Storie (T+T), Romain Meite (UA), Shong Wai Lew (UA)

11 July 2017 9:00-10:00am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- OpenSees in Python - brief demonstration and available resources (McGann)
    - Questions/Discussion (**All**)
- OpenSeesQuad2D GiD problem type and other pre/post-processing tools currently available (McGann)
- printGID command - can use to create a mesh file to view in GiD. Usage: printGID $fileName
    - Questions/Discussion (**All**)

Action Items: None

Participants: Chris McGann (UC), James Maguire (Wollongong/UA), Samuel Roeslin (UA), Seokho Jeong (UC), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Arman Kamalzadeh (UA), Yuri Wong (UA), Romain Meite (UA)**,** Shong Wai Lew (UA)

13 June 2017 9:00-10:00am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Post-processing visualisation using GiD (McGann)
    - Overview of formatting OpenSees output to be read by GiD
    - Live demonstration of post-processing features
    - Recording of the 13 June GiD Post-Processing Presentation
    - Example MATLAB script for converting OpenSees results to GiD

Action Items: Chris to post files for GiD pre- and post-processing discussions. Community to suggest topics for future meetings.

Participants: Chris McGann (UC), James Maguire (Wollongong/UA), Liam Wotherspoon (UA), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Arman Kamalzadeh (UA), Yuri Wong (UA)**,** Romain Meite (UA)

09 May 2017 9:00-10:00am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Creating OpenSees model files using GiD (McGann)
    - Overview of GiD and GiD problem types
    - Live demonstration of model generation
    - Recording of 09 May GiD Pre-Processing Presentation
    - Example GiD problemType for 2D analysis using solid elements

Action Items: None

Participants: Chris McGann (UC), James Maguire (Wollongong/UA), Liam Wotherspoon (UA), Seokho Jeong (UC), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Gislaine Pardo (UA), Arman Kamalzadeh (UA), Ananth Balachandra (UA/T+T), Shong Wai Lew (UA), Yuri Wong (UA)**,** Romain Meite (UA), Samuel Roeslin (UA)

11 April 2017 9:00-10:00am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
    - QuakeCoRE and OpenSees - What to expect and what not to expect
    - 2017 OpenSees Workshops - Recap and Discussion
- Sensitivity Analysis for Drained Triaxial Element Tests Using PDMY and ManzariDafalias Constitutive Models (Arman Kamalzadeh)

Action Items:

Brief summary of research plan using OpenSees. (All)

1. General research plan for OpenSees analysis (3-4 lines)
2. What baseline scripts/tools do you think QuakeCoRE could develop to help you with your work?
3. What scripts/tools do you intend to develop (or possibly already have) which, with some possible modification/improvement, could be useful to the general community?
4. What things do you think are specific to your problem (i.e., it likely won't benefit anyone else to spend time here)?

Participants: Chris McGann (UC), Brendon Bradley (UC), Liam Wotherspoon (UA), Seokho Jeong (UC), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Gislaine Pardo (UA), Arman Kamalzadeh (UA), Ananth Balachandra (UA/T+T), Luke Storie (T+T), Shong Wai Lew (UA), Yuri Wong (UA)

16 November 2016 9:00-10:30am NZT

The 16 November meeting was cancelled following the 14 November Kaikoura Earthquake

19 October 2016 9:00-10:30am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Update on progress for simulating very large models in parallel with OpenSeesSP (McGann, Seokho Jeong, Daniel Lagrava)
- Presentation: Robust and efficient estimation of structural collapse capacity using the central difference time integration scheme (Reagan Chandramohan)

Action Items: None

Participants: Chris McGann (UC), Brendon Bradley (UC), Liam Wotherspoon (UA), Seokho Jeong (UC), Jarrod Cook (UC), James Maguire (Wollongong/UA), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Sung Bae (QuakeCoRE), Masoud Moghaddasi (UA/UC),

21 September 2016 9:00-10:30am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Discussion: Aspects of simulation effort that could benefit from QuakeCoRE support and envisioned form of support (All)
    - Group discussion of the results of the action item from last month's meeting (repeated here):
        - Brief summary of research plan using OpenSees. Keep things in terms of an analysis-focused discussion. Group ideas into pre-processing, post-processing, and analysis/solution (e.g., solution algorithms, constitutive models).

            1. Research Plan (3-4 lines)
            2. What baseline scripts do you think QuakeCoRE could develop to help you?
            3. What scripts do you intend to develop (or possibly already have) which, with some modification/improvement, could be useful to the general community?
            4. What things do you think are specific to your problem?

Action Items: None

Participants: Chris McGann (UC), Brendon Bradley (UC), Max Stephens (UA), Seokho Jeong (UC), Jarrod Cook (UC), Chris de la Torre (UC), James Maguire (Wollongong/UA), Reagan Chandramohan (UC), Daniel Lagrava (QuakeCoRE), Sung Bae (QuakeCoRE)

Apologies: Liam Wotherspoon (UA)

17 August 2016 9:00-10:30am NZT

Agenda:

- Elaboration on purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Summary of initial OpenSees workflow tasks identified for QuakeCoRE support (Chris McGann)
    - Questions/Discussion (All)
- Discussion: Aspects of simulation effort that could benefit from QuakeCoRE support and envisioned form of support (All)

Action Items:

Brief summary of research plan using OpenSees. (All)

Keep things in terms of an analysis-focused discussion. Group ideas into pre-processing, post-processing, and analysis/solution (e.g., solution algorithms, constitutive models).

1. Research Plan (3-4 lines)
2. What baseline scripts do you think QuakeCoRE could develop to help you?
3. What scripts do you intend to develop (or possibly already have) which, with some modification/improvement, could be useful to the general community?
4. What things do you think are specific to your problem?

Participants: Chris McGann (UC), Brendon Bradley (UC), Liam Wotherspoon (UA), Max Stephens (UA), Karim Tarbali (UC), Jarrod Cook (UC), Chris de la Torre (UC), James Maguire (Wollongong/UA)

Apologies: Seokho Jeong (UC), Kevin Foster (UC), Reagan Chandramohan (Stanford)

20 July 2016 9:00-10:30am NZT

Agenda:

- Purpose and vision for QuakeCoRE OpenSees monthly webconferences (Chris McGann)
- Further details for 2016 QuakeCoRE OpenSees Student Innovation Prizes (Chris McGann)
    - Questions/Discussion (All)
- Role of QuakeCoRE in OpenSees-related research efforts (Chris McGann)
    - Discussion: Current and future use of OpenSees for QuakeCoRE and NZ researchers (All)
    - Discussion: Potential tasks and directions for QuakeCoRE support of OpenSees platform (All)

Action Items:

- Start thinking about specific aspects of your simulation effort that could benefit from QuakeCoRE support and what form this support might take (All)
- Send out calendar invitation and link to this site (McGann)
- Follow-up/reach out to other researchers that may have not known about or were otherwise unable to make this first call (McGann, All)

Participants: Chris McGann (UC), Brendon Bradley (UC), Liam Wotherspoon (UA), Hannah Dawson (UA), Seokho Jeong (UC), Karim Tarbali (UC), Jarrod Cook (UC), Kevin Foster (UC), Reagan Chandramohan (Stanford)