Questions

1) What kind of data representations and storage format can be readily handled by existing machine learning algorithms?

2) How much data is necessary for learning a good classification model?

3) What datasets are publicly available, esp. for Natural Hazards Engineering?

4) What basic types of machine learning formulations are there for modeling my data? What code is available, on what platform?

Email notes to: natalie@tacc.utexas.edu
Workshop on Artificial Intelligence in Natural Hazards Engineering
Breakout 2

Questions

1. What could be the most effective ways to combine ML with natural hazards simulations (e.g. DNN with OpenSEES)? What would be the purpose or added benefit of doing this? What do you see as the pitfalls?

2. If you are already using ML in physics-based simulation frameworks, what has been your experience so far?

3. How can Designsafe help the natural hazards community get the best use of ML to enhance simulation capabilities?

Email notes to: natalie@tacc.utexas.edu
Question 1: What is a pressing knowledge gap in your field that could benefit from introduction of AI/ML?

Score: 1 → 3 (best)
Workshop on Artificial Intelligence in Natural Hazards Engineering

Day 1: Pass the Cards Activity

Question 2: What is a primary barrier we need to overcome to advance research at the intersection of hazards engineering and AI/ML/DL?

Score: 1 → 3 (best)
Questions

1. What are some typical but challenging classification problems in Natural Hazards Engineering, and what types of models may be most promising to address them?
2. What CI resources are needed to accomplish this synthesis?
3. Are there other education, infrastructure, or programs needed to advance fruitful work at the intersection of Natural Hazards Engineering and AI/ML/DL?

Email Notes to: natalie@tacc.utexas.edu