

Tapping the Potential: Contribution of Non-Expert Citizens to Expediting the Functional Recovery of Civil Infrastructures Damaged by Extreme Events

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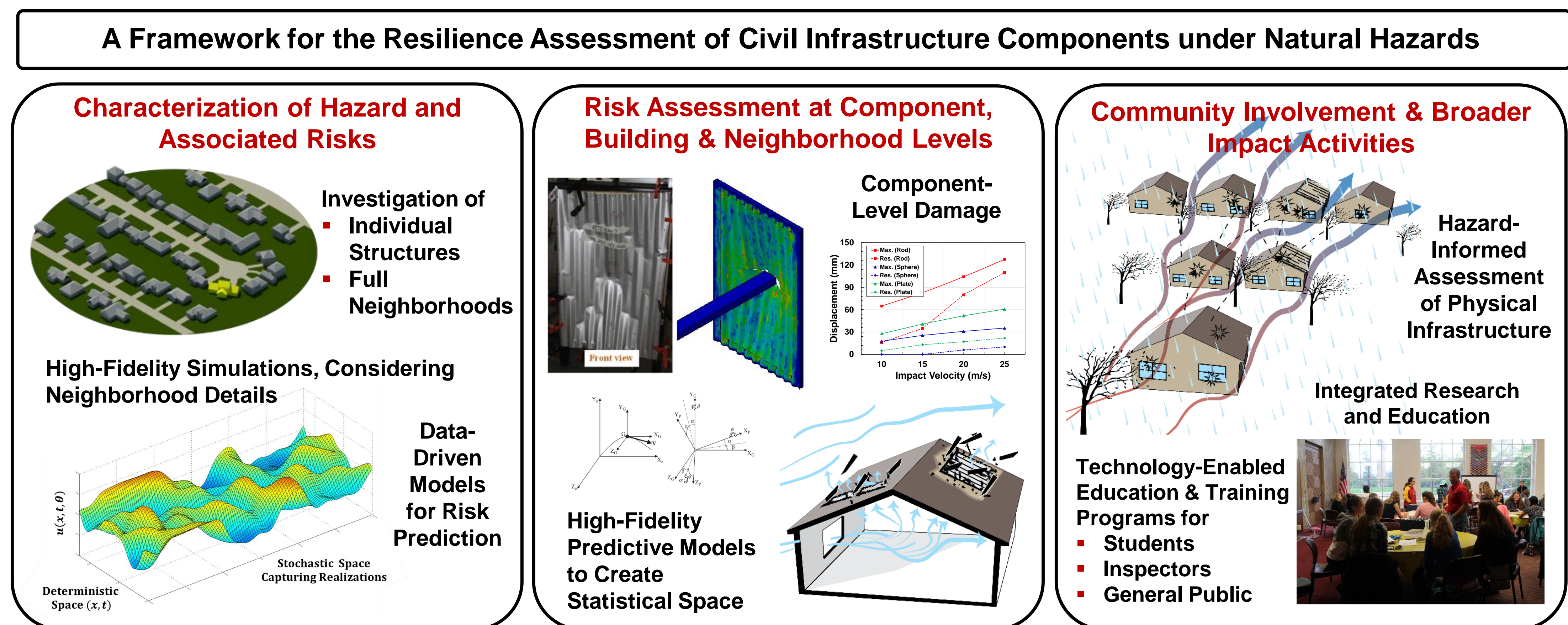
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Project Vision: The project aims to tap into the hidden capacity of non-expert citizens of the communities exposed to natural hazards. This is to enhance the damage assessment capacity of local authorities in the event of geographically large distributed natural hazards. The fundamental contribution mainly lies in the advances in experiential learning combined with community-of-practice activities.

Community-Informed Needs: Rapid damage assessment is a critical task that helps residents, business owners, and emergency management authorities evaluate the safety and extent of loss to secure the resources necessary for recovery at the earliest possible time. In reality, immediate access to enough professional crew trained for the inspection and condition assessment is *not* always possible, especially after a natural disaster that impacts a large geographic region. This need has been highlighted by multiple scoping groups contacted as part of this planning grant.

Intellectual Merit: A hierarchical platform supported by simulation environments will be created. The fundamentals of experiential learning will be enhanced with the use of novel educational environments and platforms with the ultimate goal of enhancing preparedness in the event of natural hazards.



Broader Impacts: This project engages a broad spectrum of community partners to contribute to the safety and condition assessment of damaged civil infrastructure components. Thus, it greatly facilitates mitigating the consequences of natural disasters in vulnerable communities.

Next Steps:

- To continue engaging the general public
- To finalize the identified research gaps and questions for full-scale investigations