

# Stanford

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## Barbara G Simpson

Assistant Professor of Civil and Environmental Engineering

### Bio

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#### BIO

Our research group is made up of a small team of talented students with a wide range of skills and experience. We explore advanced computational and experimental methods to characterize structural response. Our aim is to develop innovative structural systems that improve structural performance and reduce the effects of natural hazards on the built environment.

Research areas include resilient and sustainable design and retrofit of building structures and offshore renewable energy systems, performance-based earthquake engineering, and next-generation computational modeling, including real-time hybrid simulation for fluid-structure interaction.

#### ACADEMIC APPOINTMENTS

- Assistant Professor, Civil and Environmental Engineering

### Teaching

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#### COURSES

##### 2023-24

- The Dynamics of Wind Turbines: CEE 284W (Spr)
- Wind Energy Explained: CEE 34N (Win)

##### 2022-23

- Software Development in Structural Engineering: CEE 201F (Win)
- The Dynamics of Wind Turbines: CEE 284W (Spr)
- Wind Energy Explained: CEE 34N (Win)

#### STANFORD ADVISEES

##### Master's Program Advisor

Carmen Andrade von Hillebrandt, Sebastian Dow, Brandon Hariyanto, Morgan McBain, Yun Ni, Daniel Woo

##### Doctoral (Program)

Gustavo A. Araújo, Bryam Astudillo Carpio, Zahra Mazlaghani, Yun Ni, Akiri Seki