Sergio Godinez-Hernandez

IDEA Center’s Spotlight on GEAR Graduate Central Mentor

Quick Facts

Ph. D in Structural Engineering

Outside Interests: hiking, running, photography, video games, reading, walking my cat

Questions about your experiences:

What involvement as an undergraduate student led you to pursue your Ph.D? Where I did my undergraduate studies (Universidad de Guadalajara), I had a great professor that was really passionate about research and had recently returned from obtaining his Ph.D in Chile. I wanted to try research and decided to work on a thesis and obtained my degree that way. It took me two years after finishing my coursework to defend my thesis, I was already working in industry and wanted to take my time to do a good job instead of rushing it. It may have been an atypical research experience, but the relief of reaching milestones after struggling, and the satisfaction of learning by doing just made me want to continue. It felt nice when different concepts just clicked into place. Looking back this is definitely one of the reasons why I am here working to get my Ph.D.

I didn’t consider doing a Ph.D at that time, maybe I saw it as something way into the future and I’ve always struggled with thinking about the long-term future. I focused on working in industry as an undergraduate student, and then continuing to grad school after having some out-of-classroom experience. It was until I knew I was going to grad school for my Master’s that I started to think about doing the Ph.D.
What is your research about?
My research focuses on assessing the seismic performance of high-rise reinforced concrete buildings. I run simulations of buildings with a geometry representative of those located in the West Coast of the US. I use methodologies not widely used in practice to model the components of the structure such as the diaphragms, mat foundation, and core walls. I am comparing the results obtained by following what the current practice does, and more advanced (but still practical) modeling techniques.

What do you want to do after your Ph.D? Do you want to pursue academia or work in industry?
I enjoy both, but my main goal is to pursue academia after my Ph.D, I really enjoy research, teaching, and working with students. I do believe however, that academia and industry need to be closely related, have mutual support, feedback, and collaborate with each other. I would also like to be involved in industry through consulting.

From your experiences as the GEAR Graduate Central Mentor, what advice would you offer current undergraduate students?
Do not compare yourselves to others. We all come from different environments and grow with different resources and possibilities, it is unfair to you when you compare yourself negatively against someone else, and unfair to the other when you compare yourself positively against them.

Remember that you can always get support, in every aspect, don't overpressure yourself. Never hesitate to reach out to students, faculty or staff for advice or help. Unfortunately, you may sometimes encounter people that are not welcoming but don't get discouraged by this. There will always be someone willing to listen and give you some advice if you request it.

Learn how to listen, we learn a lot about others and about ourselves when we listen.