

ANDONY LANDIVAR MACIAS

PH.D. CANDIDATE | CIVIL &
ENVIRONMENTAL ENGINEERING

geotechnics



1. Where are you from? Ecuador

2. Where did you get your undergrad degree from and what was your major? Do you have a MS? Undergrad: University of Illinois Urbana-Champaign – Civil and Environmental Engineering (honors); M.Sc.: Stanford University – Geomechanics

3. What attracted you to engineering?
Being involved in engineering has allowed me to solve complex problems creatively.

4. What attracted you to pursue a Ph.D. in your specialty area?
I was interested in working out new methods and materials to improve the sustainability and resilience of cities and urban systems.

5. How do you explain your thesis research to a non-scientist?
In a similar way that marine animals such as coral reefs and mollusks use their metabolism to make hard skeletons or shells, we aim to use low electric currents to form those very same strong materials within marine sands or offshore structures for coastal protection and erosion mitigation.

6. What attracted you to NU? The possibility of joining a newly formed research group with Prof. Rotta Loria and being able to work on unprecedented research.

7. What has been the highlight of your time at NU and CEE?
Being able to present our research projects at a conference is always a satisfying moment. I was fortunate to be able to do so in the Winter School on Geomechanics for Energy and the Environment in Switzerland in January of 2020.

8. What has been the most challenging aspect of your graduate school experience?
Since we are part of a relatively new research group, setting up our laboratory devices and experiments during the peak of the Covid-19 pandemic was really the most challenging task.

9. Can you tell us about your experience being mentored or mentoring others?
The mentoring process with my adviser has helped me significantly. Through a constant exchange of ideas not only I have identified a research project that matches my interests and skillset, but I have also figured out my personal style of doing research. Mentoring undergrad and graduate students is always a fulfilling task. Being in that role of leadership by helping others with research projects has helped me grow as a person and a researcher.

10. What are your interests or hobbies outside of your research?
In my free time, I enjoy reading, playing piano, traveling, and photography.



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