

# LINA-MARÍA PUA

Atlanta, USA

lpita3@gatech.edu

## EDUCATION

---

**Ph.D. student in Civil Engineering**, Georgia Institute of Technology (Atlanta, USA), January 2021- Present

**M.Sc. (Cum Laude) in Civil Engineering, emphasis in geotechnical engineering**, Los Andes University (Bogotá, Colombia), 2017 - 2019

**B.Sc. in Civil Engineering**, Los Andes University (Bogotá, Colombia), 2012 - 2017

**B.Sc. in Geosciences**, Los Andes University (Bogotá, Colombia), 2012 - 2017

## RESEARCH

---

**ICT (Illinois Center for Transportation) project for cone penetration testing in Illinois**, Ph.D. student, Georgia Institute of Technology, January 2021- Present.

**Wave propagation on heterogeneous media**, Ph.D. student, Georgia Institute of Technology, January 2021- Present.

**Dynamic properties of clay samples with controlled variability**, project engineer, Los Andes University, July 2019 - January 2021.

**Physical modeling of inherent soil variability in three dimensions**, graduate thesis, Los Andes University, January 2018 - July 2019

**Influence of water content and suction on electrical properties of partially saturated samples of shale**, undergraduate thesis for Civil Engineering and Geosciences, Los Andes University, July 2016 - November 2016

**Field geology project in the peninsula of Azuero, Panama**, undergraduate student, Los Andes University, July 2016 - November 2016

## PUBLICATIONS

---

Pua, L.M, Villacreses, J.P., Macedo, J., Caicedo, B., and Yépez, F. 2021. A bounding approach to estimate the shear modulus of spatially variable soil materials. *Soil Dynamics and Earthquake Engineering (SDEE)*. Under review.

Pua, L.M, and Caicedo, B. 2020. Reproducing the inherent variability of soils using a three-dimensional printer. *International Journal of Physical Modelling in Geotechnics*.

Pua, L.M, Caicedo, B., Castillo, D., and Caro, S. 2018. Development of a 3D clay printer for the preparation of heterogeneous models. *In Physical Modelling in geotechnics, vol. 1, 155-162*.

## TEACHING

---

**Mentor on VIP group (Vertically Integrated Projects)**, Georgia Institute of Technology. January 2021 - May 2021. Mentorship to undergraduate students working on a CPT data clustering project.

**Graduate Teaching Assistant**, Los Andes University, July 2017 - May 2019. Geotechnical structures course.

**Civil Engineering Academic Assistance (Civil engineering department)**, Los Andes University, January 2016 - May 2017. Geotechnical structures (3 consecutive semesters) and fundamentals of geotechnics (2 consecutive semesters).

**Geoscience Academic Assistance (Geoscience department)**, Los Andes University January 2015 - November 2015. Geodynamics (1 semester) and Continuum mechanics (1 semester).

## HONORS AND AWARDS

---

**External Advisory Board Fellowship (EAB)**. School of Civil and Environmental Engineering Fellowship, Georgia Institute of Technology. 2021.

**Cum Laude degree for the Master of Science in Civil Engineering**. Los Andes University. Awarded to students with a GPA that is within 3 percent higher in the last 5 years of the faculty of engineering. 2019.

**Distinction for academic excellence in Geoscience**. Los Andes University. Awarded to the student with the highest semiannual GPA. 2012.

## SOFTWARE SKILLS

---

MATLAB, Plaxis, AutoCAD Civil 3D, Illustrator, MS Office.

## LANGUAGES

---

Spanish (Native), English (Advanced High), French (Intermediate)