# *Carolina Hurtado-Pulido*

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## EDUCATION

***Tulane University***, Louisiana, US.
PhD candidate in Geology and Earth Sciences, Department of Earth and Environmental Sciences.
August 2019 – Present.

***Universidad Distrital Francisco José de Caldas***, Bogotá, Colombia.
BE. Cadastral Engineering and Geodesy, Engineering Faculty.
August 2012 – March 2018.

## PROFESSIONAL EXPERIENCE

***Research assistant,*** GATR Laboratory with Dr. Cynthia Ebinger.
Tulane University, Louisiana US.
January 2021 – Present.

- Use of geodetic data (LiDAR and InSAR) to find surface deformation
- Group meetings organization
- Advising of one undergraduate student on GIS development and well data interpretation

***Research assistant,*** with Dr. Reda Amer.
Lamar University, Texas, US. (Online)
May 2021 – August 2021.

- Use of geodetic LiDAR data to find surface deformation west the Sabine Lake
- Model future sea level rise for the area using LiDAR data and resulting DEMs

***Teaching assistant,*** Earth as a Living Planet lab
Tulane University, Louisiana US.
August 2019 – January 2021.

***Data Analysis intern***, Secretaria Distrital de Planeación – Bogotá, Colombia.
May 2017 – January 2018.

- Analysis of statistical data
- Development of GIS and documentary maps
- Collaboration on elaboration of documents of Bogota's monographies

## POSTERS AND TALKS

***Poster.*** Hurtado-Pulido, C., Amer, R., Ebinger, C., Holcomb, H., (August, 2022). Variations in subsidence from Airborne-LiDAR differencing and Time Series InSAR in Louisiana. *In NISAR Science Community Workshop meeting*. Pasadena, USA.

***Poster.*** Hurtado-Pulido, C., Amer, R., Ebinger, C., Holcomb, H., (December, 2021). Variations in subsidence along the Gulf of Mexico passive margin determined from Airborne-LiDAR data in Louisiana and Texas. *In American Geophysical Union Fall meeting*. New Orleans, USA.

***Poster.*** Hurtado-Pulido, C., Ebinger, C., Amer, R., (December, 2020). Analyzing rates of fault creep along passive margin growth faults in coastal Louisiana using Airborne-LiDAR. In *American Geophysical Union Fall meeting* (Online)

***Talk.*** Hurtado-Pulido, C., (August, 2017). Análisis de contaminación de PM2.5 a través de herramientas geográficas en la ciudad de Bogotá. *In Semana Geomática International (International Geomatic Week*). Instituto Geografico Agustin Codazzi Bogota, Colombia.

***Talk*.** Hurtado-Pulido, C., Mendez, E., (August, 2016). Sistema de información geográfica para evaluación de equipamientos para las nuevas zonas de densificación urbana en la localidad de Kennedy (Bogotá-Colombia). In *Simposio Internacional "Derecho a la ciudad".(International symposium "Right to the City").* Instituto de Estudios Urbanos. Bogotá, Colombia

## PROFESSIONAL TRAINING

- InSAR Theory and Processing. UNAVCO. Boulder, Colorado (August 12-16, 2019).
- InSAR Processing and Time-Series Analysis for Geophysical Applications: ISCE, ARIA tools, and Mintpy. UNAVCO. Online (August 23-27, 2021).
- The Generic Mapping Tools (GMT) for Geodesy. UNAVCO. Online (July 5-7, 2022)
- InSAR Processing and Theory with GMTSAR short course. UNAVCO. Online (July 11-15).
- Hands-on Hydrogeodesy: Combining GPS and Hydrologic datasets. CUAHSI. Missoula, Montana (July 18-22).

## PUBLICATIONS

Hurtado-Pulido, C. (2017) Análisis de contaminación de PM2.5 a través de herramientas geográficas en la ciudad de Bogotá (Pollution analysis of PM2.5 using geographic tools in the city of Bogotá). Análisis Geográficos. 53, 121-141.

## UPCOMING PUBLICATIONS

Hurtado-Pulido C., Amer, R., Ebinger, C., Holcomb, H.,. Variations in subsidence along the Gulf of Mexico passive margin from Airborne-LiDAR data and Time Series InSAR in Louisiana. Journal of Geophysical Research: Earth Surface [In revision]

## OUTREACH

**Volunteer.** GeoLatinas por el Mundo. Organization of content and data analysis for the podcast initiative of GeoLatinas, this podcast shares experiences and academic/job opportunities for women in Geosciences (Spanish) (January 2022 - Present).

**Speaker**. Semana con GeoLatinas: Las mujeres en las geociencias, Museo de Geosciencias, Colombia. GeoLatinas Tulane – Equipo Local (Tulane Geolatinas – Local Team). Talks directed to women undergrad students (Spanish) (November 2020).

**Speaker**. Programa Haiko digital, Fundación Haiko. Remote Sensing – Descubriendo el mundo con un rayo laser (Remote Sensing - Discovering the world with a laser ray). Scientific talks directed to secondary and high school kids (Spanish), (July 2020)

**Volunteer**. Girls in STEM at Tulane, Tulane University. Earthquakes and Volcanoes activity (March 2020).

**Volunteer**. Boys in STEM at Tulane, Tulane University. The Missing Tooth activity (September 2019).

## MEDIA APPEARANCE, INTERVIEWS AND PODCAST

**Podcast**. Carolina Hurtado Pulido (Asistente de Enseñanza, Universidad de Tulane, EE. UU.). Estudios Planeteando – GeoLatinas por el Mundo. Spotify and AppleMusic. (April 2021)

## MEMBERSHIPS

- GeoLatinas (January 2022 - Present) – Podcast team.
- GeoLatinas (2020 - Present) – Dry Runs and Per review volunteer.
- Tulane GeoLatinas local team (2019 - Present) – Founder member.
- American Geophysical Union – (2020 – present)

## SKILLS AND INTERESTS

I code in C++, bash, and Python, I know the basics JavaScript and R. I am learning HTML and CSS as I design my personal website. I use Ubuntu and Windows. I have worked with GIS using QGIS for spatial analysis and map generation, but also, I have used ArcMap for a few years, and I am learning GMT. I am using PDAL and LAStools to process LiDAR data. TO process SAR data I am learning ISCE and MintPy. Additionally, I have taken courses on calculus, statistics, and linear algebra and I am confident of my math skills.

## LANGUAGES

Spanish – Native

English – Fluent