# Vergaray Luis

# Ph.D.(c) in Civil Engineering

Critical State of Soil Mechanics • Mine Tailings • Soil Liquefaction • Soil Dynamics • Seismic Hazard • Earthquake Engineering • Machine Learning • GIS

#### Education

2019–2023 **Ph.D.(c) in Civil Engineering**, Georgia Institute of Technology, USA, . Geosystems Department

2012–2016 B.Sc. in Civil Engineering, National University of Engineering, Peru, . School of Civil Engineering

#### Relevant Coursework

Georgia Tech CEE, Soil Mechanics, Critical State of Soil Mechanics, Theoretical Geomechanics, In situ Testing, Laboratory Characterization, Ground Modification, and Analysis of Earth Structures.

CSE, Numerical Lineal Algebra, Computational Data Analytics.

**EAS**, Introduction to Seismology.

# Experience

#### Regular

2016–2019 Junior Engineer, ZER Geosystem.

Lima. Peru.

Achievements:

- o Monitoring processing and Interpretation Of field Explorations in perforations, testing of Penetration Standard, Seismic geophysical tests: MASW, MAM, seismic refraction, measurement of microtretremors y MASW 2D
- o Develop of studies geotechnical for Shallow and deep foundation purposes, paving and urban habilitation.
- o Analysis of slope stability in soils and rock using the limit equilibrium method.
- o Development Of Seismic hazard assessments: Probabilistic, deterministic, disaggregation, spectral Matching and Seismic site response analysis.
- Soil liquefaction Analysis and numerical modeling using FEM.

#### Vocational

2016–2018 Teacher Assistant, National University of Engineering, Lima, Peru. Applied Geophysics to Civil Engineering

### Co Curricular

Workshop Fourth International Conference on Heap Leach Mining Solutions, by Edu-Mine, Lima, 10-2016.

Workshop World Engineering Conference on Disaster Risk Reduction, by World Federation of Engineering Organizations, Lima, 11-2016.

Workshop New technologies in deep foundations, by INCONTEC, Lima, 11-2017.

Online Course **Development of a national seismic hazard project**, by National Geographic Institute of Spain, 04-2018.

Workshop **2th International Course: Geotechnical and seismic engineering with applications to mining projects**, *by BERKIL*, Lima, 11-2016.

## Languages

English Fluent Spanish Native

# Computer skills

Geotechnical Slide, RocLab, GGU Stability, Signal SeismoSignal, SeismoMatch,

Software DeepSoil, Strata Processing SeismoSpect, Geopsy

Simulation Plaxis, RS2, FLAC Application MATLAB

GIS ArcGIS, Q-GIS CAD AutoCAD, Civil 3D

#### Achievements

- Recipient of Bicentennial Generation Graduate Scholarship from Peruvian Government for Ph.D.'s studies at Georgia Tech (2019–2023)).
- First Place in Geotechnical Engineering Class of 2016, National University of engineering, Peru.