

## WILLIAM GAMBOA ELLIS

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### OBJECTIVE

Offer efficient, optimal and innovative engineering solutions and an efficient and professional service.

### EDUCATION

Universidad de Costa Rica

**Master's in civil engineering**

2014 – to present time

Universidad Latina de Costa Rica

**Bachelor of Civil Engineering**

2005 - 2010

### TEACHER EXPERIENCE

Universidad de Costa Rica

Engineering faculty, school of Architecture

**Professor – “Design of concrete structures”**

2012 – to present time

**Professor – “Foundation design”**

2012 - to present time

**Professor – “Design of Steel structures”**

2012 - to present time

### EXPERIENCIA

PierTech Foundation Company

**President**

2018 – to present time

Founder and president of PierTech Foundation Company, a company dedicated to the design and construction of special foundations capable of working in Central America.

PierTech also does all the designs and load tests of aggregate piers for Firstmark Foundations, company dedicated to the construction of foundations located in Montana USA.

Independent consultor

**Structural and geotechnical design**

2014 - 2017

Building design up to 7 stories

Structural and geotechnical design of buildings for expansion and remodeling of the facilities of the company Cargill in Managua, Nicaragua.

Geotechnical design of structural slab 175x45m, to support 16 wheat silos of 20mx16m each.

Pre-dimensioning of double cantilever bridges with lengths from 100 to 3700 meters in projects Girardot-Puerto Salgar, Barranquilla-Cartagena, Pacific 2 and Pacific 3, all of these in Colombia, this pre-design includes super-structure and sub-structure, everything related to the pilings of the bridges.

First engineer in Central America certified in the design and construction of Helical Piles, this certification is granted by the company CHANCE.

- More than 100 project designs using helical piles.

- First load test on helical piles in Costa Rica.

Edificadora Industrial, San Jose, Costa Rica

**Geotechnical design**

2011 – 2013

Designer at national level and responsible for the installations and load tests of the Geopier system.

With this system I had the opportunity to design more than 70 projects to improve the soil of structures such as buildings, storage tanks, warehouses and wind turbine towers.

Arena consultores, San Jose, Costa Rica

**Structural design**

2010 – 2011

Structural design of the foundations of telecommunications towers for Claro, responsible for processing permits in the different national entities for the construction of telecommunications towers.

Costa Rican electricity institute ICE, San Jose, Costa Rica

**Intern**

**2010**

Conceptualization and development of electronic sheets for the design of retaining walls of different types and under different loading conditions.

**SOFTWARES**

- SAP 2000, Etabs, Tricalc
- Autocad, Mechanical Desktop
- EPANET, Office, SPT (survey)
- SETTLE 3D
- MIDAS CIVIL (Basic)
- HELICAP
- PLAXIS

**MEMBERSHIPS**

ACIES Costa Rican Association of Structural and Seismic Engineering.

CFIA Federated College of Engineers and Architects.

**COURSES AND ADDITIONAL PARTICIPATIONS**

Theoretical-practical course of the Helical Piles system at the headquarters of Chance in Missouri, USA

Congress of Latin American Engineers of Geopier 2012 and 2013

"Analysis and design of foundations", CIC

"Rammed Aggregate Pier Soil Reinforcement Technical Training", course given at Geopier Foundation Company, Phoenix Arizona

"Design of concrete structures based on the ACI318S-08 standard", LANAMME

"Design of metal structures", CIC

Congress of structures 2011, "Structural and seismic engineering", CIC

"Masonry design", CIC

IFCEE technical conference 2018 in Florida, USA.