Victor H. Calderon

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CV Date: 07/26/2025

EDUCATION

Ph.D., Civil and Environmental Engineering, Princeton University, 2025 – Present

Advisor: Jürgen Hackl – Complex Infrastructure System (CIS) group

M.S., Structural Engineering, Stanford University, 2025

Relevant coursework: Seismic Hazard and Risk Analysis, Machine Learning, Reinforcement Learning, Nonlinear Structural Analysis, Performance-Based Earthquake Engineering

B.S., Civil Engineering, Pontifical Catholic University of Peru PUCP, 2018

Exchange Student, Department of Structural and Geotechnical Engineering, Pontifical Catholic University of Chile, Fall 2018

EXPERIENCE

2024 - 2025	Graduate Student Researcher, Baker Research Group. Analyzing the relationship between recorded seismic data and current seismic design codes.
2024	Forensics Summer Intern, Thornton Tomasetti New York City, NY. Worked with team of ten engineers to develop retrofit and repair plans for buildings.
2023	Project Eng., Inversiones Generales Pegaso C&N, Peru. Wrote over twenty technical and financial proposals for multimillion-dollar bids.
2022	Associate Consultant, Pasquel Consultores, Peru. Researched and collaborated to develop a new structural concrete design using mine tailings.
2021	Structural Eng., Equilibrio 3 Structural Engineering, Peru. Designed seven commercial and residential building projects between 8 and 19 stories.
2019 - 2020	Structural Eng., JAChavez Ingenieria, Peru. Participated in the design and analysis of six residential building projects.
2018	Student Researcher, Laboratory of Civil Engineering, PUCP. Developed two analytical models of two two-story adobe modules tested in the shaking table.

HONORS AND AWARDS

– Stanford Structural Engineering and Mechanics and Computation (SEM) Fellowship. Awarded a $14k research fellowship, 2024.

– Peruvian Ministry of Education Bicentennial Generation Scholarship. Granted a $120k scholarship to pursue the M.S. degree, 2023 – 2025.

– Awarded Summa Cum Laude for my undergraduate thesis "Feasibility of protecting with seismic isolation a limited-ductility-wall social housing", 2021.

– Center for Interuniversity Development CINDA Scholarship. Recipient of a $5k scholarship for participation in exchange program in Chile, 2017.

PUBLICATIONS

Archival Journal Publications

1. **Calderon, V. H.**, and Baker, J. W. (2025). "Observed ground motions that exceeded design response spectra in the Western United States". Submitted to Earthquake Spectra (in review).

2. **Calderon, V. H.**, and Vilca, F. O. (2023). "Feasibility of protecting with seismic isolation a social housing building in Peru." (In Spanish) Revista Internacional de Ingeniería de Estructuras, 28(2), 161–180. https://doi.org/10.24133/riie.v28i2.2999.

Undergraduate Honors Thesis

3. **Calderon**, **V. H**. (2021). "Feasibility of protecting with seismic isolation a limited-ductility-wall social housing." (In Spanish) Pontifical Catholic University of Peru Digital Repository. Available at: http://hdl.handle.net/20.500.12404/20108

TEACHING ASSISTANT EXPERIENCE

Stanford University

Course #	Title	Term	Enrollment
CEE288	Seismic Hazard and Risk Analysis	Winter 2025	36

Pontifical Catholic University of Peru

Course #	Title	Term	Enrollment
2CIV02	Structural Analysis	Fall 2021 – Spring 2023	53 – 51
ING134	Mechanics for Engineering	Spring 2021	30
CIV226	Reinforced Concrete	Fall 2020 – Spring 2021	49 – 52
CIV227	Earthquake-Resistant Design	Spring 2020	61
ING215	Strength of Materials	Spring 2019	39

TECHNICAL SKILLS

Programming	Proficient in MATLAB, Python, C++, Julia, LaTeX
Engineering	SAP2000, Revit, CAD, Seismic Design of Concrete and Steel Structures
Mapping	QGIS and ArcGIS Online

SERVICE

– Volunteer at the University Pastoral Advisory Center at PUCP. Contributed to a community service program in Lima's underserved areas, building prefabricated homes and supporting children's education, 2014 – 2018.

LENGUAGES

Spanish (native) and English (fluent)