# Curriculum Vitae


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| Name: | José Mauricio CEPEDA | | |
| Date of Birth | 28 September 1969 | | |
| Nationality: | El Salvador | | |
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| Position: | Senior Engineer, Division for Risk, Slope Stability and Climate Adaptation, Norwegian Geotechnical Institute (NGI) |
| Education: | PhD in Geosciences (Department of Geosciences, University of Oslo, Norway, 2009)<br>MSc in Soil Mechanics and Engineering Seismology (Department of Civil Engineering, Imperial College, London, United Kingdom, 1995)<br>BSc in Civil Engineering (Department of Civil Engineering, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador, 1993) |
| Languages: | Spanish (mother tongue), English (fluent speaking, Professional writing), Norwegian (intermediate level) |
| Countries where worked | Norway, El Salvador, Nicaragua, Guatemala, Costa Rica, Peru, United Kingdom, Cuba, Dominican Republic, India, Vietnam, Sri Lanka, Czech Republic, Indonesia, France, Kyrgyzstan |

## Key Qualifications

José Cepeda has a wide range of experience from teaching, research and consulting in Geotechnical Engineering.

Major fields of work relate to:

- Landslide hazard and risk assessment
- Design of slope stabilization measures
- Geotechnical site investigations
- Monitoring and assessment of earthquake strong motion
- International R&D projects

Engineering projects include:

- Design of landslide mitigation measures at regional and local scales (2009 – present)
- Assessment of earthquake ground motion attenuation at geothermal project for Imperial College Consultants (2002-2003)

(more details on engineering experience available on request)

## Previous positions

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| 2017 - | Associate Professor, Department of Geosciences, University of Tromsø, Norway. |
| 2016 - | Norwegian Geotechnical Institute (NGI). Senior Engineer, Division for Risk, Slope Stability and Climate Adaptation. |
| 2016 - | Guest lecturer. Department of Earth Science, University of Bergen, Norway. |
| 2015 - | Guest lecturer. Department of Geosciences, University of Oslo. |
| 2013 - 2014 | Senior Advisor and lecturer. Department of Geosciences, University of Oslo. |
| 2012 - 2016 | Norwegian Geotechnical Institute (NGI). PhD at the Landslides and Georisk Division. |
| 2009–2012 | International Centre for Geohazards (ICG) - Norwegian Geotechnical Institute (NGI). SafeLand Project, Leader of Work Package 1.3. |
| 2009–2012 | Norwegian Geotechnical Institute (NGI). PhD at Natural Hazards Division |
| 2006–2012 | Guest lecturer, Department of Geosciences, University of Oslo, Norway. |
| 1998–2004 | Civil Engineering Advisor and Coordinator, School of Engineering, Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. |
| 1997–2004 | Coordinator of Geotechnical Laboratory, Department of Structural Mechanics, Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. |
| 1996–2004 | Lecturer, Departments of Civil Engineering, Structural Mechanics, and Electronics and Informatics, School of Engineering Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. |
| 1996–2004 | Manager of Earthquake Strong Motion Network, Department of Structural Mechanics, School of Engineering Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. |
| 2002–2003 | Consultant, Hot Fractured Rock Project in Berlin (Usulutan, El Salvador), Imperial College Consultants, United Kingdom. |
| 1993–1994 | Lecturer, Department of Civil Engineering, School of Engineering, Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. |
| 1993–1994 | Junior Structural Engineer, ESTRUCSA, San Salvador, El Salvador. |

## Professional Societies

- International Society for Soil Mechanics and Geotechnical Engineering - ISSMGE.
- Norwegian Geotechnical Society - NGF.
- European Geosciences Union – EGU.

# Professional Activities

- Member of the Technical Committee for Structural Safety (committee for the development and updating of the Salvadoran Building Code), Ministry of Public Works, El Salvador (2002–2004).
- Member of Review Committee of the Risk Assessment Study of the Bálsamo Ridge, Ministry of Environment and Natural Resources, El Salvador (2002)

# Presentations

About 25 seminars in connection with research and consultancy projects both in national and international conferences in Austria, El Salvador, Norway, USA, Italy, Hong Kong, Peru, Guatemala, Honduras, Cuba, Vietnam, Dominican Republic, India and Sri Lanka.

# Publications

Author/co-author of more than 50 papers in professional journals, books and conferences.
(list available on request)

# Engineering Experience

The following describes some of the projects worked on:

### Consulting Practice

*Instrumentation and monitoring*

- Training of field personnel on the installation and operation of automatic rain gauges in the states of Tamil Nadu and Uttarakhand, India (2011, 2017).
- Training of field personnel on the installation and operation of strong motion instruments in the project site. Hot Fractured Rock Project in Berlin (Usulutan, El Salvador), Imperial College Consultants, United Kingdom. (2002–2003).
- Manager of Earthquake Strong Motion Network, Department of Structural Mechanics, School of Engineering Universidad Centroamericana “José Simeón Cañas” (Jesuit University), San Salvador, El Salvador. (1996-2004).

*Landslides*

- Mapping of Quick-Clay in the municipalities of Oslo, Re, Stokke, Tønsberg, Tromsø, Snåsa, Tingvoll, Eide, Fauske, Tromsø (2009-2014).
- Mapping of Quick-Clay and slope stabilisation on road and railway projects in Norway: European highway E6 segment Nygård-Slomarka (Akershus and Hedmark counties), InterCity railway segment Nykirke-Barkåker (Vestfold county), Ringerike rail- and highway segment Sundvollen-Hønefoss, Nordland line railway around Skatval (2014-present).
- Slope stabilization measures in the municipalities of Enebakk, Stjørdal, Sande, Ramnes and Dal (2009-2015).
- Assessment of hydro-meteorological thresholds for landslide early-warning systems in Norway (2013)
- Landslide risk assessment in Kyrgyzstan, SENSUM project (2013).
- Landslide risk assessment in Indonesia (2010) and El Salvador (2012) for the United Nations International Strategy for Disaster Reduction – UNISDR.
- Submarine slope stability evaluations at the wreckage site of the German submarine U-864 (2010-2011).
- Assessment of landslide hazard and risk on the San Vicente and San Miguel volcanoes, El Salvador (2002-2004).

*Seismic hazard*

- Third party control of feasibility study for dam and aluminium smelting plant project in Peru (2010).
- Study of attenuation of ground motions affecting project site. Hot Fractured Rock Project in Berlin (Usulutan, El Salvador), Imperial College Consultants, United Kingdom. (2002–2003).
- City Team Leader group for San Salvador, El Salvador. Pilot Project “Global Earthquake Safety Initiative” (GESI). Funding: GeoHazards International (GHI), United Nations Centre for Regional Development (UNCRD), and United States Agency for International Development Office of Foreign Disaster Assistance (USAID/OFDA). Partners: GHI, UNCRD and organizations in the twenty-one participating cities around the world (2000–2001).

*Site Investigations*

- Geotechnical lab and field tests for slope stabilisation projects in Norway (2011-present)
- Geotechnical lab and field tests for building construction projects in the Metropolitan Area of San Salvador (1997-2004).

## Research Practice

*Research and Development*

- Leader of work package 3 "water triggered landslides" in innovation centre Klima 2050 (www.klima2050.no), a consortium of 20 partners from the industry, public and research sectors. Financing from the Norwegian Research Council and partners. 2015-present.
- Project "Landslide Hazard Assessment and Forecasting System using Near Real-Time Remote Sensing Information over SERVIR-Mesoamerica". Leading partner: National Aeronautics and Space Administration (NASA). 2012 – 2016.
- Project "NIFS-N1 Q-Bing – Runout model for quick clay slides". Researcher. Financed by the Norwegian Public Roads Authority – NPRA. 2012
- Project “SafeLand” funded by the Seventh Framework Programme for research and technological development (FP7) of the European Commission. December 2009-April 2012
    - Leader of Work Package 1.3 “Statistical studies of thresholds for precipitation-induced landslides”.
    - Webmaster Extranet.
- Project “Renewal of the accelerograph network in El Salvador and characterisation and effects of earthquake ground motions”. Funding: Spanish Agency of International Cooperation. Partners: Universidad Centroamericana “José Simeón Cañas”, Servicio Nacional de Estudios Territoriales, Universidad Politécnica de Madrid. May 2002 – December 2003.
    - Analyses of earthquake ground motion.
    - Design and implementation of an earthquake damage database.
    - Numerical estimation of fault planes.
    - Analysis of seismic catalogue.
    - Analysis of site response using H/V spectral ratio.
- Project “Assessment of Seismic Risk in El Salvador”. Funding: European Community. Partners: Imperial College, Universidad Centroamericana “José Simeón Cañas”, Universidad Complutense, Instituto Geográfico Nacional (Spain), Institut de Physique du Globe de Paris, National Technical University of Athens. November 1995 – December 1998.
    - Installation and operation of digital accelerograph network.
    - Processing of strong motion records.
    - Assessment of earthquake ground-motion attenuation.

## Teaching Practice

- Associate Professor, Department of Geosciences, University of Tromsø, Norway.
    - Geotechnics – Spring 2017.
- Guest lecturer, Department of Earth Science, University of Bergen, Norway, 2016-present.
    - Guest lecturer in Landslides.
- Guest lecturer, Department of Geosciences, University of Oslo, 2015-present.

- Guest lecturer in Landslides and Geotechnics.

- Senior advisor and lecturer, Department of Geosciences, University of Oslo. 2013-2014.
  - Lecturer in Landslides – Autumn 2013 and 2014.
  - Lecturer in Geomechanics – Spring 2013 and 2014.
- Supervisor/co-supervisor in 9 master theses, Department of Geosciences, University of Oslo, 2010-present.
- Lecturer, United Nations Development Programme (UNDP) GREG programme on Risk Management with Gender Equity (broadcasted by video-conference from Oslo, Norway), participants in Dominican Republic, El Salvador, Guatemala, and Peru. December 2008.
  - Landslide Risk and Early Warning Systems – December 2008.
- Lecturer, United Nations Development Programme (UNDP) Graduate course on Risk Management with Gender Equity (broadcasted by video-conference from Oslo, Norway), Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. October 2008.
  - Seismic and Landslide Risk: Assessment, Mitigation and Management - October 2008.
- Lecturer, Course on Landslide Warning and Risk Assessment in Central America, DGIM School (United Nations University and ITC - Netherlands), Antigua Guatemala, Guatemala, June 2008.
  - Assessment of Landslide Run-Out - June 2008.
  - Threshold Analyses for Rainfall-Triggered Landslides - June 2008.
- Teaching Assistant, Department of Geosciences, University of Oslo, Norway, 2006 and 2007.
  - GEO4170– Landslides and Debris flows – Autumn 2006, Autumn 2007.
- Guest Lecturer, Department of Geosciences, University of Oslo, Norway, 2006, 2009, 2010, 2011 and 2012.
  - GEO4180 - Geohazard Mitigation – Autumn semester.
- Lecturer, Department of Structural Mechanics, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. July 2005.
  - Course on Laboratory and Field Geotechnical Testing – July 2005.
- Guest Lecturer, Faculty of Engineering Geology, Mining, Metallurgy and Geography, Universidad Nacional Mayor de San Marcos, Lima, Peru. October 2003.
  - Lecture on Earthquake and Landslide Hazards in El Salvador – October 2003.
- Civil Engineering Advisor and Coordinator, School of Engineering, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. Spring 1998 – Autumn 2004.
- Supervisor of 10 Civil Engineering Senior Theses, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. Spring 1996 – Autumn 2004.
  - Topics of theses: Statistical Methods of Landslide Susceptibility, Assessment of Seismic Vulnerability of Structures, Collapsible

Behaviour of Volcanic Soils, Liquefaction, Debris Flows and Lahars, Guidelines for Design of Geotechnical Structures (Foundations, Slopes and Retaining Structures), Assessment of Slope Stability of Unsaturated Volcanic Soils, Field Guides for Identification of Earthquake-Induced Geotechnical Failures, and Practices in Geotechnical Engineering Consultancy.

- Lecturer, Department of Structural Mechanics, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. Spring 1993 – Spring 1994 and Spring 1996 – Autumn 2004.
    - Design of Steel Structures – Spring 1994.
    - Engineering Seismology – Spring 1996, Spring 1999, Spring 2002.
    - Foundations – Spring 1998, Spring 1999, Spring 2000, Spring 2001, Spring 2002, Spring 2003, Spring 2004.
    - Soil Mechanics – Autumn 1997, Autumn 1998, Autumn 1999, Autumn 2000, Autumn 2001, Autumn 2002, Autumn 2003, Autumn 2004.
    - Statics – Autumn 1996, Autumn 2001.
    - Strength of Materials – Autumn 1993, Spring 1994.
    - Structural Analysis I – Spring 1993, Spring 2002.
- Lecturer, Department of Electronics and Informatics, Universidad Centroamericana "José Simeón Cañas" (Jesuit University), San Salvador, El Salvador. Autumn 1997 – Spring 2001.
    - Numerical Methods for Engineering – Spring 1997, Autumn 1997, Spring 1998, Autumn 1998, Spring 1999, Autumn 1999, Spring 2000.

Date: 2017-07-04 Signature: