



Jaime F. Argudo, Ph.D., P.E.(Tx)

Nationality: Ecuadorian
Date of Birth: October 3, 1963
Address: Argudo & Associates Co.
Parque Empresarial Colón
Bloque Empresarial #3, Mz. Of. 12
Guayaquil, Ecuador
Phone: (593) (89) 9784600 Mobile
(593) (4) 2136615
E-mail: jaime.argudo@argudoyasociados.com
Blog: www.jaimeargudo.com

Education

- 2006 Philosophy Doctor
University of Texas at Austin, USA
- 2003 Master of Science of Engineering
University of Texas at Austin, USA
- 2000 International Course “Risk Management in Community Development Planning, RiMC-2000”.
SSPA Sweden AB. Sponsored by SIDA, The Swedish International Development Cooperation Agency.
- 1996 Trainee Course “Laboratory techniques and structural models for Earthquake Engineering Research”
Centro Nacional de Prevención de Desastres (CENAPRED)
Mexico, D.F. Sponsored by The National Science Foundation of Ecuador (FUNDACYT)
- 1992 International Course “Use of information on natural disasters to prepare investment projects”.
Centro de Investigaciones Sísmicas y Mitigación de Desastres (CISMID).
Lima, Perú. Organized by The Organization of American States (OAS).
Sponsored by The Japanese International Cooperation Agency (JICA)
- 1989 - 1990 International Course on Earthquake Engineering. International Institute of Seismology and Earthquake Engineering Building Research Institute at Tsukuba, Japan. Sponsored by JICA.
- 1986 Bachelor of Sciences of Engineering.
Major on Structural Engineering
Universidad Católica de Santiago de Guayaquil, Ecuador

Relevant Professional Experience on Disaster Mitigation and Preparedness

- 2012 Consultant for The Ministry of Transportation, Harbors and Highways of The Republic of Mauritius on Climate Change Adaptation. Provided trainee to Engineers and Architects in a Workshop on Adaptation Design Measures for Climate-Change-Resistant Buildings, Bridges and Highways. Under The UNDP Program for Climate Change Adaptation in Africa..
- 2011 Consultant for the Ministry of Health and Family of the Republic of Maldives for Developing Guidelines and Standards for Safe Infrastructure and Quality of Services in Hospitals and Social Protection Buildings, under the Representative Office in Maldives from The World Health Organization and (WHO-Maldives) and The South East Asian Regional Office of The World Health Organization (SEARO-WHO).
- 2010 Consultant for the Review of the Maldives Building Code 2008, under The Ministry of Housing, Transportation and Environment (MHTE) from The Republic of Maldives and the United Nations Development Program (UNDP-Maldives.)
- 2001 Consultant for the preparation of "The Structural Vulnerability Assessment of Hospitals in Kathmandu Valley, Kingdom of Nepal".
Under the South East Asian Regional Office of The World Health Organization (SEARO-WHO).
- 2000 – 2001 Consultant for the preparation of "The Technical Manual for Design of Earthquake Resistant Structures in Guayaquil".
Under the United Nations Development Program (UNDP) and The Municipal Government of Guayaquil.
- 1997 – 2001 Responsible Researcher for "The structural assessment of low-cost housing projects in Ecuador"
Under Universidad Catolica de Guayaquil and The National Science Foundation of Ecuador (FUNDACYT).
- 1998 - 2000 Local Responsible Scientist for the RADIUS international project (Risk Assessment Tools for Diagnosis of Urban Areas against Seismic Disasters)
Under The United Nations IDNDR Secretariat and The Municipal Government of Guayaquil. Supervised by GeoHazards International.
- 1997 – 1998 Author of "The Seismic Risk Study of Guayaquil city downtown area".
Under a research grant from MAPFRE Foundation of Spain
- 1997 Design of structural repairing and seismic strengthening of Velasco Ibarra hospital in Tena, Ecuador (120 beds, 6,000 m²) damaged during the October 1995 earthquake.
Under the Ministry of Public Health of Ecuador, the Pan-American Health Organization and The Government of Belgium (1996).

Relevant Professional Experience on Disaster Mitigation and Preparedness

- 1997 Consultant for the preparation of "Guidelines for mitigation of damages in school buildings in the Coastal Zone of Ecuador, during El-Niño floods"
Under The Unit of Sustainable Development and Environment of The Organization of The American States (UDSMA-OAS).
- 1996 – 1998 Responsible researcher for "The study of Attenuation Laws in the Coastal Zone of Ecuador"
Under Universidad Catolica and The National Council of Ecuadorean Universities (CONUEP).
- 1995 - 1996 Director of project "Earthquake Vulnerability Assessment of 20 hospitals in Guayaquil".
Under The Emergency and Disaster Preparedness Program (PED) of PAHO/WHO.
- 1995 Consultant for the preparation of "Technical specifications for repairing and strengthening the bus-terminal building in Guayaquil"
Under Universidad Catolica and Fundacion Ecuador.
- 1993 Research Assistant for "Experimental Study of Dynamic Characteristics of the Atucha-II Nuclear Reactor Building in Argentina". Under Kajima Co. from Japan
- 1992 - 1994 Consultant to the project "Disaster preparedness and mitigation of an Earthquake in Guayaquil"
Under The United Nations Department of Humanitarian Affairs (UNDRO/DHA/ISDR)

Relevant Professional Experience on Structural and Civil Engineering

- 2011 – ARGUDO AND ASSOCIATES Co., Structural and Geotechnical Engineering, Guayaquil, Ecuador – President. Building Design and Seismic Rehabilitation of Buildings. Most Recent Projects:
- a. Geotechnical and Structural Design Peer Review and Design of Foundations for Power House, Fuel and Water Tanks and Pavements, for The JIVINO II Power Plant (40MW) in Sucumbíos, Ecuador. For CGE (Consortio Generacion Ecuador)
 - b. Geotechnical and Structural Design of Harbor Facilities (Dolphins, Port and Fences) and The Warehouse Structure for Steel Recycling from Ships for NOVACERO Steel Factory in Duran.
 - c. Geotechnical and Structural Design of the new building for Strategic Sectors from The National Petroleum Company (PETROCOMERCIAL) in Guayaquil. 8-story building (10,000 m²). Under Pillegi Co.
 - d. Geotechnical and Structural Design of MARRIOTT PLAZA Samborondón. Building. A 9-story building (16,000 m²) for Multiple Uses (Commerce, Hotel, Parking and Apartments). Under MORGAN & MORGAN, Fiduciary & Trust Corporation S.A.
 - e. Geotechnical and Structural Design of Foundations for Fuel and Water Tanks and Retaining Walls for new IQUITOS Power Plant (20MW) in Peru. Under ENERTEL Consortium.

Relevant Professional Experience on Structural and Civil Engineering

- 2010 - STANER, Co, Technical Manager, Guayaquil, Ecuador
Construction of Deep Pile and Shallow Foundations
- 2009 - CONSUASORIS, Cia Ltda, Guayaquil, Ecuador – Consultant. Structural Design and Seismic Rehabilitation of Harbour Facilities.
- 2009 - SINECUANON Co. Ltd., Guayaquil, Ecuador - Consultant
Structural Design and Seismic Rehabilitation of Energy and Water Treatment Plant Facilities.
- 2008 Lead Design Engineer, GlenMartin Inc, Boonville, Missouri.
www.glenmartin.com
Structural Design and Wind and Seismic Rehabilitation of Communication Towers.
- 2007 - 2008 Senior Engineer, The Structural Diagnostics Services Group from Walter P. Moore and Associates, Inc., Houston – Texas.
www.walterpmoore.com
Structural Design, Wind and Seismic Assessment and Retrofitting of Buildings.
- 2006 Project Manager, Engineering Diagnostics Inc., Austin – Texas
www.engineeringdiagnostics.com
Structural Diagnostics, Wind and Seismic Assessment and Retrofitting of Buildings and Building Curtain Walls.
- 1996 – 2012 Consultant on Foundation Design and Diagnosis and Repairs for existing building foundations subjected to soil distress.
GEOCON Ltd., Guayaquil – Ecuador.
- 1991 Structural design of buildings and other structures
CONSULSISMICA Ltd., Guayaquil – Ecuador.
- 1990 - 1991 Structural design of a pump station building, warehouses and other facilities for the Catarama Irrigation Project (6,000 hectares). Under Nippon Koei Co. from Japan
- 1989 Planning Officer
Under The National Council of Planning of Ecuador (CONADE).
- 1986 – 1994 Free Lance contractor for construction of residential housing
- 1986 – 1988 Structural analysis of buildings and other structures
Under Lara, Tola y Serrano Co. (LATSE)

Relevant Academic Experience

- 1990 - Present, Associate Professor (Earthquake Engineering)
School of Engineering, Universidad Católica de Guayaquil – Ecuador
- 2002 – 2006 Teaching Assistant and Graduate Research Assistant at The School of Engineering and Ferguson Structural Engineering Laboratory of The University of Texas at Austin.
- 1998 – 2001 Director of The Institute of Research and Development (IIFIUC),
School of Engineering, Universidad Católica de Guayaquil – Ecuador
- 2000 Visiting Professor (Structural Dynamics), School of Earth Sciences Escuela Superior Politécnica del Litoral ESPOL
- 1990 – 2001 R&D Project Assistant and Project Manager at IIFIUC in the following areas: Earthquake Engineering, Disaster Preparedness and Management, Structural Vulnerability Assessment of Critical Facilities, Low-cost housing projects
- 1990 Visiting Professor (Reinforced Concrete), School of Maritime Sciences and Port Engineering, Escuela Superior Politécnica del Litoral (ESPOL)
- 1986 – 1989 Assistant Professor (Calculus I and II), School of Engineering, Universidad Católica de Guayaquil – Ecuador
- 1982 – 1986 Teaching Assistant (Calculus I), School of Engineering, Universidad Católica de Guayaquil – Ecuador

Relevant Publications

- Argudo J., “*Structural engineering’s role in gíreles telecom.*” Above Ground Level (AGL) Magazine (The oficial magazine for PCIA and SWAP), November 2008 (pages 18-19.) A Biby Publishing, LLC Publication.
- Tian, Y., Jirsa J., Bayrak O., Widiyanto and Argudo J., “*Behavior of Slab-column Connections of Existing Flat Plate Structures*”. ACI Structural Journal V. 105, No. 5, September-October 2008, Title No. 105-S52.
- Widiyanto, Tian Y., Argudo J., Bayrak O. and Jirsa J., “*Use of Carbon-Fiber Reinforced Polymers in Slab-Column Connection Repair.*” Proceedings of The Third International Conference on Composites in Civil Engineering, Miami, Florida, December 2006.
- Widiyanto, Tian Y., Argudo J., Bayrak O. and Jirsa J., “*Rehabilitation of Slab-Column Connections.*” Proceedings of the Eleventh International Conference on Extending the Life of Bridges, Concrete Composites, Buildings, Masonry and Civil Structures. Edinburgh, England, June 2006.
- Argudo J.F., “Non-destructive Evaluation of Gravity Load Carrying Capacity and Lateral Load Damage in a Reinforced Concrete Slab-column Connection.” Ph.D. Dissertation, University of Texas at Austin, May, 2006.

**Relevant
Publications**

Widianto, Tian Y., Argudo J., Bayrak O. and Jirsa J., "*Rehabilitation of Earthquake-damaged Reinforced Concrete Flat-plate Slab-column Connections for Two-way Shear.*" 8th National Conference on Earthquake Engineering (8NCEE), San Francisco - California, April 2006.

Tanner J.E., Varela J.L., Brightman, M. J., Cancino, U.L., Argudo, J.F. and Klingner, R.E. "*Seismic performance and design of Autoclaved Aerated Concrete (AAC) Structural Systems*". Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 2004.

Klingner, R.E., Tanner J.E., Varela J.L., Brightman, M. J., Argudo, J.F. and Cancino, U.L., "*Technical Justification for Proposed Design Provisions for AAC Structures: Introduction and Shear Wall Tests,*" ACI523A Special Publication, ACI Fall Meeting, Boston, Massachusetts, 2003.

Argudo J.F., "*Evaluation and Synthesis of Experimental Data for Autoclaved Aerated Concrete*". MSE Thesis, The University of Texas at Austin, Austin, Texas, August 2003.

Argudo J. F., "*The Structural Vulnerability Assessment of Hospitals in Kathmandu Valley, Kingdom of Nepal*". Final Report to The World Health Organization, Kathmandu, Nepal, December 2001

Argudo J.F., Mera W., Villacres A. and Peña J., "*The RADIUS project in Guayaquil – Ecuador*". A collection of 9 Volumes in Spanish, 1 Volume in English (1150 pages) and 1 CD-ROM. Universidad Católica de Guayaquil, Ecuador. January 2000.

Argudo J.F., "*The RADIUS full study case in Guayaquil city*". Proceedings of the International Course Risk Management in Community Development Planning, RiMC-2000, SSPA Sweden AB, 2000.

Argudo J.F., Fuentes A. and Guamán Jaime, "*Performance of a masonry house constructed in a low housing project in Guayaquil – Ecuador*". *Proceedings of the VIII North-American Masonry Conference*. The Masonry Society, Austin – Texas, 1999.

Argudo J.F., "*Guidelines for mitigation of damages in school buildings in the Coastal Zone of Ecuador, during El-Niño floods*". UDSMA-OAS Publication, CRID electronic database, 1998. See magazine in digital format at

<http://www.crid.or.cr/digitalizacion/pdf/spa/doc10156/doc10156.htm>

From 1986 through 2009, near 40 technical papers published in Seminar and Conference Proceedings held in Ecuador and other countries.

Relevant Skills Negotiation and working in group abilities;
Disaster Preparedness Planning, Information Management and Preparation of Emergency Reports;
Project Proposal Design;
Project Set up and Management;
Data analysis and evaluation of needs;
Structural and Non-structural assessments of critical facilities;
Damage Evaluations and Vulnerability Analysis;
Forensic Investigations;
Structural Design of earthquake resistant structures;
Design of repairing and strengthening of existing structures
Experience with Low-cost housing projects, School buildings and Health facilities;
Experience with Building Code Development and Design Standards for Existing and New Facilities;
Knowledge of computer programs for structural analysis ETABS and SAP2000 (including pushover analysis), and Office XP;
Fluency in English and Spanish with very good drafting ability.

Awards 1986 School of Engineering Amador Icaza Award
1986 Society of Civil Engineers Award
1982 through 1986 The Filantrópica Society Award

Professional Societies 2008 Member of the Concrete Repair Institute (Dallas Chapter) from the American Concrete Institute (ACI)
2008 Member of the American Society of Civil Engineers. (ASCE)
2007 Member of the Board of the Structural Engineers Association of Texas (SEAoT) – Austin Chapter.
2006 - Professional Engineer License from the State of Texas - USA P.E. #98578
1986 – Present, Ecuadorian Society of Civil Engineers
Professional Engineer License in ECUADOR P.E. #09-2340
2002 – 2006 International Code Council (ICC), International Existing Building Code (IEBC) Committee Member.
2000 – 2002 Member of the Ecuadorian Building Code Committee