Nestor David Mejía Almeida CURRICULUM VITAE



WORK EXPERIENCE

OCT 2015 - Nov 2023

University of the Armed Forces ESPE a Quito-Ecuador Researcher and Professor

Full-time professor and researcher in the Civil Engineering career at Army University. Responsible for conducting various research projects such as Experimental and Computational Modelling of the Blast Loading in the Concrete Specimen, Lahar Flow Simulation by Augmented Reality, and Engineering Mechanics Statics and Structural Analysis courses.

June 2012 - Feb 2015

Engineer Consulting, Beijing-China *Technology Exchange*

He provided the technology exchange between America and Asia through supporting engineering to validate the quality of technology, equipment maintenance, equipment installation, and equipment configuration, set up the best performance, and negotiated price and contract conditions.

July 2010- Aug 2013

Researcher Jiaotong Univesity, Beijing Aerodynamic Study of a High Speed Train

Provided a study in detail of the aerodynamic behavior of a high-speed train so that we could establish the level of influence of the physical variables that affect the stability of the system, supporting with simulations CFD or numeric analysis, and additionally validating the accuracy of the mathematical models and physical models which are used to describe the turbulence phenomenon in the simulations by CFD.

SCIENTIFIC ARTICLES

Nestor Mejía, Ricardo Peralta, Rodrigo Tapia, Ricardo Durán, Andrés Sarango, Damage assessment of RC columns under the combined effects of contact explosion and axial loads by experimental and numerical investigations, Engineering Structures, Volume 254, 2022, 113776, ISSN 0141-0296, https://doi.org/10.1016/j.engstruct.2021.113776.

PATENTS

Innovation patent, SENADI-2021-88040, Test specimen destructive apparatus and test method.

Industrial patent, SENADI-2021-88034, Industrial design of a compression destructive testing machine for reinforced concrete columns under blast loads.

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EDUCATION

2023 - Current Phd

PhD student in Civil and Environmental English

Polytechnic of Torino

Turin - Ital

2010 – 2013 Master of Science in Engineering

FLUID MECHANICS

Beijing Jiaotong University

2002-2008 Undergraduate

MECHANICAL ENGINEERING
National Polytechnic School

Quito-Ecuador

COURSES

2020 Grasshopper2019 Microsoft Project

2019 Teaching Method

2018 STRUCTURAL ENGINEERING

2018 FINITE ELEMENTS LSDYNA

COMPUTER SKILLS

Advanced Knowledge Ansys, Fluent, Autodyn, LATEX,

Inventor, Auto-Cad,

Matlab, Solid-Works, Grasshopper

Microsoft Windows,

COMMUNICATION SKILLS

SPANISH Native ENGLISH Fluet

CHINESE Proficient Beijing Jiaotong University

Aug 2009- Feb 2011

KOREAN Proficient Chonnam National University

Aug 2013- Feb 2015

French Conversational