europass

N/A N/A

Address: Italy

WORK EXPERIENCE

[01/11/2019 – Current]

The Shear Capacity of Truss-Type Prefabricated Beams: Tests, Mechanical Model, Design Calibration, and Optimization

Faculty of Civil and Industrial Engineering, Sapienza University of Rome https://www.ing.uniroma1.it/

Address: Via Eudossiana 18, 00184, Rome, Italy
City: Rome
Country: Italy
Name of unit or department: Department of Structural and Geotechnical Engineering, Faculty of Civil and Industrial Engineering
Business or sector: Education
Main activities and responsibilities:
Scheme of Research
- Phase 1: Formulation of a shear capacity equation for (TTP) Beams according to Eurocode 2, based on the theory of the variable-angle strut typically used in reinforced concrete, adapted to TTP.
- **Phase 2:** Extension of the shear capacity equation to consider construction stages.
- Phase 3: Calibration of partial factor covering uncertainty in the resistance model according to NTC-18 and EN 1990 (“Design by testing”). This calibration is based on experimental results, both performed and available in the literature.
- Phase 4: Optimization of TTP beams using equations obtained from phases 1-3, considering hierarchy with the bending capacity, in order to identify the most efficient truss topologies, also in terms of costs.

[01/04/2013 – 30/06/2013]

Research Assistant on a Project on Composite Truss Beams

Sapienza University of Rome

City: Rome
Country: Italy
Name of unit or department: Department of Structural and Geotechnical Engineering
Business or sector: Professional, scientific and technical activities
Main activities and responsibilities:
- Strain Gages Installation
- Concrete Casting
- Experimental Test Setup
- Everyday Test Report
- Experimental Test Results

[08/2011 – 01/2012]

Site Engineer

Nazir Irfan Construction Company (NICC), and Barak Shirzai Construction Company (BSCC)

Address: 2201, Gardez, Afghanistan
City: Nangarhar and Kabul
Country: Afghanistan

Main activities and responsibilities:
- Advice in the planning
- Overseeing building work
- Solving technical issues
- Providing technical advice
- Supervising contracted staff
- Ensuring site safety
- Ordering and negotiating the price of materials
- Organizing meeting for problems solving
- Checking and preparing site reports

EDUCATION AND TRAINING

[01/11/2018 – Current]

Third Year Doctoral (Ph. D.) Student

Faculty of Civil and Industrial Engineering, Sapienza University of Rome

Address: Via Eudossiana 18, 00184, Rome, Italy
Level in EQF: EQF level 8
Main subject / occupational skills covered:
- Direct and Inverse Dynamic Problems in Random Vibrations
- CORSO - Costruzioni esistenti in muratura "Marcello Ciampoli"
- Teoria Strutturale
- Modelling of Offshore Structures
- APESS 2019 (12th Asia-Pacific-Euro Summer School) on Smart Structures Technology
- Dynamics of Structures (Linear and Non-linear Dynamic Analysis of Structures)
- Information Literacy Skills, Research Strategies and Sharing your Findings

[01/11/2014 – 16/03/2016]

Master in "Advanced Modelling, Analysis and Design of Structures according to Eurocodes (Master EuroProject)

Faculty of Civil and Industrial Engineering, Sapienza University of Rome

Address: Via Eudossiana 18, 00184, Rome, Italy
Level in EQF: EQF level 7
Main subject / occupational skills covered:
- Basis of Probability
- Modelling and Analysis of Structures
- Eurocodes 0, 1: Basis of structural design, Action on structures
- Eurocodes 2, 3: Design of concrete structures, Design of steel structures
- Eurocodes 4, 5: Design of composite steel and concrete structures, Design of timber structures
- Eurocodes 6, 7: Design of masonry structures, Geotechnical design
- Eurocodes 8, 9: Design of structurers for earthquake resistance, Design of aluminium structures

[15/02/2012 – 15/02/2013]

Exchange Student to Master in Evaluation Controlled and Reduction of the Environmental Seismic Risk

Sapienza University of Rome

Address: Via Antonio Gramsci 53, 00197, Rome, Italy
Level in EQF: EQF level 5
Main subject / occupational skills covered:
- Earthquake Engineering
- Anti-Seismic Design of Reinforced Concrete
- Seismic Isolation
- Design of Masonry Structures
- Assessment of Existing Masonry Structures

[09/2007 – 06/2012] **Bachelor of Science (B. Sc) 5 Years Degree in Civil Engineering**

Nangarhar University

Address: Kabul-Jalalabad Highway, Daronta, 2601, Jalalabad, Afghanistan
Level in EQF: EQF level 6
Main subject / occupational skills covered:
- Engineering Mechanics Statics
- Mechanics of Materials
- Structural Analysis
- Soil Mechanics (Geotechnical Engineering)
- Reinforced Concrete Design to ACI Code
- Road Construction
- Environmental Engineering
- Construction Project Quality Management (CPQM)
- Construction Safety

[09/2003 – 06/2006] **High School (12 Grade) Degree**

Baroo High School

Address: Baroo, Rodat, 2661, Jalalabad, Afghanistan
Level in EQF: EQF level 4
Main subject / occupational skills covered:
- Mathematics / Algebra
- Physics
- Geometry
-Chemistry
- Trigonometry etc.

LANGUAGE SKILLS

Mother tongue(s): Pashto

Other language(s):

English

LISTENING B2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Italian

LISTENING B1 **READING** B1 **WRITING** B1

SPOKEN PRODUCTION B1 **SPOKEN INTERACTION** B1

German

LISTENING A2 **READING** A2 **WRITING** A2

SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** A2

Dari (Persian)

LISTENING B1 **READING** B1 **WRITING** B1

SPOKEN PRODUCTION B1 **SPOKEN INTERACTION** B1

DIGITAL SKILLS

My Digital Skills

Microsoft Word | Microsoft Powerpoint | Microsoft Excel | Palisade @RISK for Risk Analysis | SAP 2000 | Autodesk Auto CAD | CDS Software

PUBLICATIONS

[2016] **Experimental Tests on Composite Steel-Concrete Truss Beams**
https://www.scientific.net/AMM.847.68

M. A. **Kareemi**, F. **Petrone**, G. **Monti**, (2016) Experimental Tests on Composite Steel-Concrete Truss Beams, Applied Mechanics and Materials, Vol. 847, pp. 68 – 75.

10.4028/www.scientific.net/AMM.847.68

DRIVING LICENCE

Motorbikes: AM
Cars: B

RECOMMENDATIONS

Professor, Supervisor

Name: Prof. Giorgio Monti
Email: giorgio.monti@uniroma1.it

Prof. Monti is a Full Professor at the Department of Structural and Geotechnical Engineering, Sapienza University of Rome, via Gramsci, 53 – 00197, Rome, Italy, and at the Department of College of Civil Engineering and Architecture, Zhejiang University, 866 Yuhangtang Rd, Hangzhou 310058 P.R. China.

Professor

Name: Prof. Giuseppe Carlo Marano
Email: giuseppe.marano@polito.it

Prof. Marano is a Full Professor and Vice Head of Department (Department of Structural, Geotechnical and Building Engineering) at Polytechnic University of of Turin (Politecnico di Torino), Corso Duca degli Abruzzi, 24, 10129 Torino, ITALY.

Professor

Name: Sashi Kunnath
Email: skkunnath@ucdavis.edu

Prof. Kunnath is a Full Professor at the Department of Civil and Environmental Engineering, University of California at Davis One Shields Avenue Davis, CA 95616, USA.

HONOURS AND AWARDS

[2014] **Second Level Master Awarding institution:** Sapienza University of Rome

Master in “Advanced Modelling, Analysis and Design of Structures according to Eurocodes

(Master EuroProject)".

[16/01/2012] **Scholarship winner under EU-NICE- Erasmus Mundus Action 2 Program Awar ding institution:** Sapienza University of Rome

The Erasmus Mundus Project "EU-NICE: Eurasian University Network for International Cooperation in Earthquake" was a scholarship awarded after a selection among about 1000 candidates for study in Europe, and it was funded by the European Commission

ORGANISATIONAL SKILLS

Organizational skills

- Good command of organizational and managerial skills learnt through the opportunity of working with Nazir Irfan Construction Company (NICC) and Barak Shirzai Construction Company (BSCC), Camp Thunder, Gardez Project of USACE, Paktia Province, Afghanistan.

COMMUNICATION AND INTERPERSONAL SKILLS

Interpersonal Skills

- Apart from Conflict resolution, Authenticity, Emotional intelligence, Articulation and tone of voice, I have good ability to listen and communicate effectively with a wide range of people, and to adapt in multicultural environments gained during my stay generally in Europe and specifically in Italy & Germany
- Good communication skills expanded through my experience as Research Assistant in different research activities during my research career.

COURSES

Various course in different dates

Course of Existing masonry buildings "M. Ciampoli ", 13-29 May 2020, Sapienza University of Rome.

1st Short Course on Multihazard for Extreme Events: *Fires, Explosions, Flood, Earthquakes, September 17-20, 2019,* University of Cagliari (Italy).

5th International Workshop DISS_17- Dynamic Interaction of Soil and Structure, October 19 -20, 2017, Roma Tre University of Rome.

2nd International Short Course on "Seismic Analysis of RC Structures using OPENSEES", February 17, 2017, Roma Tre University of Rome.

SLT (Seminar for Language Teachers), Kabul English Language Center, Sanayee Development Foundation, May 3, 2005, Peshawar, Pakistan.

Special writing class, Kabul English Language Center, Sanayee Development Foundation, July 20, 2005, Peshawar, Pakistan.

CERTIFICATES

Various Certificates

Specialization Course, issued by EDIL CAM ® Sistemi S.r.l in partnership with GLIS, Seismic Isolation Working Group, order of Architects of the Province of Rieti, order of Engineers of the Province of Rieti, May 21, 2015, ATER of the Province of Rieti.

PRESENTATIONS

[12/07/2021 – 12/07/2021] **Optimization of (TTP) Truss-Type Prefabricated Beams**

Quick review of Truss-Type Prefabricated (TTP) beams.

Experimental tests on TTP beams.

Calibration of partial factor covering uncertainty in the resistance model according to NTC-18 and EN 1990 (“Design by testing”), based on experimental results, both performed and available in the literature.

[16/10/2020 – 16/10/2020] **Optimization of (TTP) Truss-Type Prefabricated Beams**

Introduction to TTP Beams (productions stages, advantages, and usage.)

Formulation of a shear capacity equation for (TTP) beams according to Eurocode 2, based on the theory of the variable-angle strut typically used in reinforced concrete, adapted to TTP.

Extension of the shear capacity equation to consider construction stages.

[10/03/2016 – 10/03/2016] **Experimental Behaviour of Composite Truss Beams, March 10, 2016,**

Introduction to Composite Truss beams or REP ® beams, production stages, usage, geometrical and mechanical parameters of CT beams, members geometrical and mechanical properties, strain gages installation, concrete casting, experimental test setup, experimental tests and their results.

[2012] **Design of 8 km long road on Turkham Jalalabad road.**