Giorgio Anitori

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Academia

	Lecturer (Professor associat)	2019-current	Universitat Politècnica de Catalunya "UPC" DECA (Department of Civil and Environmental Engineering) **Bachelor Civil Engineering** -Building structures (Spanish/Catalan) **Master in Civil Engineering** -Building structures (English) -Foundations (English)
	PhD "System reliability based methods for bridge inspection"	2020	Universitat Politècnica de Catalunya "UPC"
	Spanish Civil engineer license	2016	Spanish Ministry of Education
	Italian Civil engineer license (PE and checker)	2011	Ordine degli Ingegneri della provincia di Viterbo (Italy)
	MSc Civil engineering (Structures)	2008-2010	University of Roma "la Sapienza" (Italy)
	BSc Civil engineering (Structures)	2003-2008	University of Roma "la Sapienza" (Italy)

Publications and congresses

Indexed journals:

Methodology for Development of Live Load Models for Refined Analysis of Short and Medium-Span Highway Bridges
Anitori, G., Casas, J., Ghosn, M.
Structure and Infrastructure Engineering, August 2017.

WIM-based live-load model for advanced analysis of simply supported short- and medium-span highway bridges
Anitori, G., Casas, J., Ghosn, M.
ASCE. Journal of bridge engineering , October 2017, vol. 22, núm. 10, p. 04017062-1-04017062-11.

Redundancy and Robustness in the Design_Evaluation of Bridge Structures. European and North American Perspectives
Anitori, G., Casas, J., Ghosn, M.
ASCE. Journal of bridge engineering, SPECIAL SECTION: Eurocodes and Their Implications for Bridge Design: Background, Implementation, and Comparison to North American Practice, 1241–1251.

Bridge System Safety and Redundancy
Ghosn M., Anitori G., Yang J., , Beal D., Frangopol D., Sivakumar B., Fu G., Miao F., Beregeon A., Yelkikanat T.
NCHRP 12-86.

10 congress and seminary publications and presentations in the design and maintainance of structures with particular focus on bridges.

Handling exceptions (Rome, Italy, 2010), ACI “Structural engineering congress” (Las Vegas, USA, 2011), MATCOMP (Girona, Spain, 2011), IABMAS (Stresa, Italy, 2012), IABSE (Seoul, South Korea, 2012), ICOSSAR (New York, USA, 2013), IABMAS (Foç do Iguazu, Brazil, 2016).

Research

	Research period in Brno (CZ)	2015 (2 months)	Department of structural mechanics in "Brno University of Technology" (VUT) supported by the Spanish Ministry of Economy supervised byl prof. Drahomir Novak
Analysis of concrete bridge with corrosion deterioration, time deterioration forecast, detalied FEM analyis, study of the program Freet and Atena and comparison with Opensees simplified models.			
	Research period in New York (USA)	2014 (4 months)	Civil engineering department "The City College of New York" (CUNY/CCNY) by the Spanish Ministry of Economy supervised by prof. Michel Ghosn
Traffic data analysis provided by the NY department of Transportation. Development of a **traffic model for bridges** adapted to the measurement site. Trafficl load for bridge design and assessment of steel bridges in NY state, USA.			
	Research period in New York (USA)	2013 (6 months)	Civil engineering department "The City College of New York" (CUNY/CCNY) by the Spanish Ministry of Economy supervised by prof. Michel Ghosn
Steel bridge design and assessment optimization. **Steel-concrete composite bridge analysis** and parametric study for the assessment of NY state bridges. Concrete bridge corrosion of rebar and effect of bond-slip.			
	Research fellowship	2011 (4 years)	Supported by the Spanish Ministry of Economy supervised by prof. Joan Ramon Casas
Robustness of beam bridges Steel and concrete types, rehabilitation strategies, assessment optimization, advanced analysis methods (reliability). Inspection data usage for the assessment optimization of corroded steel bridges. Structural redundancy and robustness for decision making in bridge networks.			
	Research project	2011 (9 months)	Project REHABCAR (INNPACTO) supported by the Spanish Ministry of Economy supervised by prof. Joan Ramon Casas
Structural robustness of concrete precast box girder bridges			

Working experience

	Head of WTG foundation department	2018-current (6 years)	Company “Esteyco”, Barcelona (Spain)

- From 2022 **Head of the WTG foundation department**. Manager of a team of 7 professionals. Involved in projects for a total of (Approximately 1 GW/year).
- **Off-shore platform Atoms**, founded by the European Union. Responsible for the structural design of the platform and top-side supporting structure. The platform is an unmanned semisubmersible element equipped with a self-installing crane (Liftra) able to carry out OEM operations and minimizing the use of expensive jack up vessel. Prototype designed for the ELISA Telescopic concrete tower installed in Arinaga (Gran Canaria, Canary Islands).
- **Near-shore support structure** design check for Vestas (Tra-Vinh, Vietnam wind farm) 12x4.2 MW
- **Near-shore support structure** preliminary design for Vestas (Yeong-wang, South Korea Wind farm) 55x5.6 MW
- Detailed design of **shallow and deep foundations of WTG** (wind turbine generator) foundations for renewable energy company or WTG manufacturer (Jinke, General Electrics, ENEL GP, EDPR, Engie, Vestas, Enercon, Siemens-Gamesa, Goldwind, Total Energy among others) and for constructions firms (TSK, Sacyr, Acciona, Colbun, CJR, Adani among others).
- Repair of the CENER **blade test facility**, fatigue calculation for life time estimation
- Design of Esteyco patented **braced foundation** technology for the optimization of materials, construction sequence and power production.
- **Life time extension** of the Iberdrola WF of end-of-life (20 years old approximately). WF in Spain, Scotland and Greece.
- Design of **concrete and hybrid towers** for WTG, clients Acciona, General Electric, WEG, Jinke.
- Technical committee member of the **NCh 2369** for seismic design of industrial constructions (Chapter 14, wind farms) and **NCh 433** seismic design of buildings.
- **B-Luzatu research project** funded by the “Comunidad autonoma del Pais Vasco” for the study of new methodology to evaluate the state of WTG foundations by indirect monitoring and lifetime extension calculation strategies.

PEDELTA	Civil Engineer, Structural, Consultant	2016-2017 (2 years)	Company “Pedelta”, Barcelona (Spain)

- **Eglinton Crosstown LRTP**. Design of SOE and construction sequence of 4 Metro Stations in the earth of the city of Toronto (CAN). Displacement control of the surrounding building structures. Cut and Cover. Design of steel bridges for the excavation period. Technical support to the site (Client: Crosslinx Transit Solution).

- **East Portal (Eglinton Crosstown LRTP).** Design of the build-back system and construction stages of a concrete concrete box transition between the undergound and shallow section of the Eglinton Crosstown Metro (Client: Crosslinx Transit Solution).
- Construction sequence and alternative study for a dock in the Barcelona port to accomodate a boat lift system (**Syncrolift**, Client: UTE Syncrolift, Dragados).
- Quality control of the structure for the first section of the cover for the Ronda de Dalt, Barcelona (**Cubriment ronda de Dalt**, Client: Ajuntament de Barcelona).
- **Fourth Bridge over Panama Canal design**. Preliminary study of pile walls for the accomodation of acces roads below ground level (bidding process).

	Civil Engineer, Structural, Consultant	2012-2015 (4 years)	Freelance (VT, Italy).

- Concept design of **cable-stayed bridge** (spans 30x4+250+30x4) for the Wadi Mughsayl in Oman for Tender documents (Omani Ministry of Transport)
- Consulting service for **precast prestressed concrete bridges** in Oman
- Structural and geotechnical design of **precast prestress concrete** cover for a parking. Site technical assistance.
- Structural and geotechnical design of **concrete buildings** (Ronciglione,VT, Italy).
- Rehabilitation of **historical building**, restoring of wooden decks with light-weight concrete and shear studs. Seismic adaptation of the design solution with the NTC Italian code.
- Technical assistance to the feasibility study of a steel building in the Rio Vicano valley in a very steep slope and with part of the **foundation cantilevered**. Study of volcanic rock foundation and stabilization of the slope surface.

Languages

English	★★★★☆
Italian (MT)	★★★★★
Spanish	★★★★☆
Catalan (Level C1)	★★★★☆

Programming languages

Opensees/Tcl	★★★★★
Matlab	★★★★☆
Excel/vba	★★★★☆

Analysis tools

SAP2000	★★★★★
Staad Pro	★★★★☆
Cubus (Statik, Fagus, Cedrus)	★★★★☆
DeepEx	★★★★☆
Ansys/Abaqus	★★☆☆☆
Xtract	★★★★★