

## Education and Qualification:

Mar 2006	Ph.D Degree in Civil and Environmental Engineering, Department of Civil Engineering, University of Messina, Italy Dissertation: "Computational Methods in Stochastic Mechanics and Structural Reliability", maximum grade
Jun 2002	Civil Engineer, successful participation at the Qualification Exams for Engineers, University of Messina, Italy
Mar 2002	Civil Engineer Master Degree, Department of Civil Engineering, University of Messina, Italy. Final grade: 110/110 cum laude and academic mention, Thesis: "Bounds of the probability of collapse of structures with stochastic strengths through equilibrium finite elements" (in Italian)

## Employment history:

Nov 2018- Present	Associate Professor, Department of Engineering, Aarhus University
Nov 2017- Oct 2018	Senior Research Fellow, Berkeley Education Alliance for Research in Singapore Limited (BEARS) (100% research)
Feb 2015- Nov 2017	Senior Research Fellow, Nanyang Technological University (NTU), under the program SinBerBEST – Singapore Berkeley Building Efficiency and Sustainability in the Tropics (100% research)
Jan 2013- Jan 2015	Research Fellow, Department of Civil and Environmental Engineering, National University of Singapore, Singapore (100% research)
Sep 2010- Dec 2012	Structural Engineer, "De Cola Associates", Messina, Italy
Jul 2009- Jun 2010	Lecturer, Department of Civil Engineering, University of Messina (100% teaching)
Sep 2008- Jun 2009	Postdoc Researcher, Department of Civil and Environmental Engineering, University of California at Berkeley (100% research)
Mar 2006- Aug 2008	Postdoc Researcher, Department of Civil Engineering, University of Messina (20% research, 80% teaching)
Nov 2002- Mar 2006	Research Engineer (PhD student), Department of Civil Engineering, University of Messina (30% research, 70% teaching)
Mar 2002- Nov 2002	Research Engineer, Department of Civil Engineering, University of Messina
Nov 1998- Dec 1999	Teacher of undergraduate classes
Nov 1992- Nov 2001	Developer of relational databases Teacher of undergraduate classes, private lessons

## Research Experience:

Nov 2020- Present	Quantum-inspired probability (QIP), Uncertainty Quantification (QI-UQ), risk analysis, machine learning (QI-ML) and AI (QI-AI)
Nov 2018- Present	Data Science and Probabilistic AI for Sustainable and Resilient Building Design
Nov 2018- Present	Risk-Informed Digital Twin for sustainable and resilient design of engineering systems
Nov 2017- Present	Data Science and Probabilistic AI for Sustainable and Resilient Urban Communities
Feb 2015- Nov 2017	Development of a Decision Support Tool (DST) for sustainable and resilient building design. Supervisor: Prof. K.M. Mosalam, University of California at Berkeley
Jan 2013- Jan 2015	Stochastic Dynamic Analysis and Reliability Assessment of Steel Catenary Riser. Supervisor: Prof. C.G. Koh, National University of Singapore
Sep 2008- Jun 2009	Nonlinear Stochastic dynamic analysis. Supervisor: Prof. A. Der Kiureghian, University of California at Berkeley
Mar 2002- Aug 2008	Computational Methods in Structural Reliability and Stochastic Mechanics. Supervisor: Prof. G. Ricciardi, University of Messina
Mar 2002- Nov 2002	Stochastic Limit Analysis. Supervisor: Prof. G. Ricciardi, University of Messina

## Teaching Experience:

Jan 2024 - Jun 2024	Digital tools in construction (lecturer), Aarhus University, Denmark
Jan 2024 - Jun 2024:	Research Methods in Civil Engineering (supervisor), Aarhus University, Denmark
Aug 2023 - Dec 2023	Reliability, Risk and Resilience for the built environment (coordinator), Aarhus University, Denmark

Aug 2023 - Dec 2023	Statistics and Machine Learning (coordinator), Aarhus University, Denmark
Aug 2023 - Dec 2023:	Machine Learning in Civil and Architectural Engineering (coordinator), Aarhus University, Denmark
Jan 2023 - Jun 2023:	Research Methods in Civil Engineering (supervisor), Aarhus University, Denmark
Aug 2022 - Dec 2022:	Machine Learning in Civil and Architectural Engineering (coordinator), Aarhus University, Denmark
Aug 2022 - Dec 2022:	Statistics and Machine Learning (coordinator), Aarhus University, Denmark
Aug 2022 - Dec 2022:	Risk and Reliability in Civil Engineering (coordinator), Aarhus University, Denmark
Jan 2022 - Jun 2022	Research Methods in Civil Engineering (supervisor), Aarhus University, Denmark
Jan 2022 - Jun 2022	Structural Concepts (teacher), Aarhus University, Denmark
Aug 2021 - Dec 2021	Statistics and Machine Learning (coordinator), Aarhus University, Denmark
Aug 2021 - Dec 2021	Risk and Reliability in Civil Engineering (coordinator), Aarhus University, Denmark
Jan 2021 - Jun 2021	Structural Concepts (teacher), Aarhus University, Denmark
Aug 2020- Dec 2020	Risk and Reliability in Civil Engineering (coordinator), Aarhus University, Denmark
Jan 2020 -Jun 2020	Structural Concepts (teacher), Aarhus University, Denmark
Aug 2019- Dec 2019	Risk and Reliability in Civil Engineering (coordinator), Aarhus University, Denmark
Jul 2017	Hybrid System Design for Smart City, Tsinghua Berkeley Shenzhen Institute (TBSI), summer class developed by Prof. K.M. Mosalam and Prof. Lin Zhang (19-22 July)
Sep 2009- Jun 2010	"Static and mechanics of structures", "Advanced mechanics of structures", Department of Civil Engineering, University of Messina, Italy
Sep 2007- Jul 2008	"Static and mechanics of structures" for one deaf student, Department DASTEC of the University of Reggio Calabria
Feb 2007- Jul 2007	"Static and mechanics of structures", Department DASTEC, University of Reggio Calabria
Feb 2007- Dec 2007	"Mechanics of Materials", Department ASTRA, University of Catania
Mar 2003- Jun 2008	"Computational mechanics of structures", "Advanced Mechanics of Materials", "Earthquake engineering", "Theory of structures", Department of Civil Engineering, University of Messina

## Research Proposals (funded)

2022 PI:	Quantum-inspired Bayesian Networks (QBN) for structural integrity and lifetime evaluation of offshore platforms (main applicant), Radical Innovation Sprint, DTU Offshore
2022 co-PI:	Data-driven Chemical Transport Model (co-PI), IClimat, Aarhus University
2019 PI	Resilient Artificial Intelligence System Engineering, Tsinghua-Berkeley Shenzhen University (PI, writing proposal)
2018 PI	A Data-Driven Optimization Approach to Improve the Resilience of the Singapore Mass Rapid Transit Network
2017	Integrated Design, Prototyping and Testing: Experimental and Computational Platform for Novel Façade Concepts, SinBerBEST Phase 2, Theme C, Project 2. Integrating a Decision Support Tool with the Testbed, inBerBEST Phase 2, Theme E, Sample Project 5