

CURRICULUM VITAE

of LAURA SEVERINI

PERSONAL INFORMATION

Laura Severini

📍 Department of Civil and Environmental Engineering, University of Perugia
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Sex Female | Date of birth 10/08/1986 | Nationality Italian

POSITION

PhD Student at the Department of Civil and Environmental Engineering, University of Perugia - PhD in Civil Engineering and Advanced Materials XXIX cycle.

- Main research interest: safety assessment of masonry arch-type structures by static and dynamic analyses.

WORK EXPERIENCE

30/11/2015 – now

Tutor of the Course of “Mechanics of Structures and Materials” A.A. 2015/2016 at the Department of Civil and Environmental Engineering, Perugia.

University of Perugia, Via G. Duranti 93, 06125, Perugia, Italy

19/01/2015 – 05/06/2015

Tutor of the Course of “Mechanics of Structures and Materials” A.A. 2014/2015 at the Department of Civil and Environmental Engineering, Perugia.

University of Perugia, Via G. Duranti 93, 06125, Perugia, Italy

06/2013-12/2013

Training at “Studio tecnico Domus System”

Via Adige n. 8, San Giustino, Perugia, Italy

- Evaluation of the energy performance of new/existing buildings, structural design.

Business or sector Civil Engineering

EDUCATION AND TRAINING

2016

Winning of a scholarship as Visiting Student at University of Cambridge (UK)

02/2013 - 12/2013

Training course for “Expert in energy qualification and renewable energies”

Centro Studi e Formazione Villa Montesca, Città di Castello, Perugia, Italy

- Winner of a scholarship within the program “Regional Competitiveness and Employment” (POR Umbria FSE Obiettivo Competitività Regionale e Occupazione 2007-2013)
- Evaluation of the energy performance of new/existing buildings, knowledge of systems for the use and transformation of renewable energy

16/05/2013

Master Degree Summa Cum Laude in Civil Engineering (Curriculum Structural Engineering)

University of Perugia, Via G. Duranti 93, 06125, Perugia, Italy

- Topic of the dissertation: “Analisi limite di archi in muratura in grandi spostamenti”, supervisor Prof. Vittorio Gusella

22/05/2009 Bachelor Degree Summa Cum Laude in Civil Engineering

University of Perugia, Via G. Duranti 93, 06125, Perugia, Italy

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Computer skills

- good command of Microsoft Office™ tools
- programming in Visual Basic, Fortran and MATLAB environment
- good command of automatic drawing softwares: Autocad, Revit
- good command of structural design softwares: Sap2000, Sismicad
- good command of buildings energy efficiency softwares: Edilclima, MC4Suite 2014

ADDITIONAL INFORMATION

Honours and awards

2009 - Award as Best Student in Civil Engineering (Bachelor Degree), Department of Civil and Environmental Engineering of the University of Perugia.

Publications

- N. Cavalagli, V. Gusella, L. Severini. Effects of the thickness and angle of embrace uncertainties on the limit equilibrium of masonry arches under horizontal loads. Submitted to the 10th International Conference of Structural Analysis of Historical Constructions. Leuven, Belgium, September 2016.
- N. Cavalagli, V. Gusella, L. Severini. Lateral loads carrying capacity and minimum thickness of circular and pointed masonry arches. Submitted for publication to the International Journal of Mechanical Sciences.
- M. F. Bonfigli, M. Breccolotti, N. Cavalagli, V. Gusella, L. Severini. Seismic assessment and rehabilitation of masonry arch bridges. International Conference Aid Monuments: materials techniques restoration for architectural heritage reusing. Perugia, Italy, May 2015. In press.
- N. Cavalagli, V. Gusella, L. Severini. Limit analysis in large displacements of masonry arches subjected to vertical and horizontal loads. Proceedings of the 9th International Conference of Structural Analysis of Historical Constructions. Mexico City, Mexico, October 2014.

Projects

Development of a software in MATLAB environment for the expeditious seismic vulnerability assessment of masonry arch road bridges. Study of applied research commissioned by the Provincia of Perugia (Area viabilità), 2014.

Memberships

Passed the government exam and licensed as a profession engineer in 2013. Enrolled as a member of the Engineering Association of Perugia.

- Presentations**
- N. Cavalagli, F. Cluni, G. Comanducci, M. Gioffré, V. Gusella, L. Severini, F. Ubertini. From structural investigations to continuous monitoring for a seismic vulnerability mitigation of monumental buildings. Experiences in Umbria. Giornata dell'Ambiente. Convegno Resilienza delle città d'arte ai terremoti - Enhancing Resilience of historic cities to earthquakes, Roma, Italy, Accademia dei Lincei, 3rd e 4th November 2015. Poster presentation.
 - N. Cavalagli, V. Gusella, L. Severini. Limit analysis of masonry arches and applications. XXII National Conference AIMETA – Associazione Italiana di Meccanica Teorica e Applicata. Genova, Italy, September 2015.
 - M. F. Bonfigli, M. Breccolotti, N. Cavalagli, V. Gusella, L. Severini. Seismic assessment and rehabilitation of masonry arch bridges. International Conference Aid Monuments: materials techniques restoration for architectural heritage reusing. Perugia, Italy, May 2015.
- Courses and Seminars**
- Seminar “Recent Investigation on the Aeroelasticity of Slender Structures: Good Wind versus Bad Wind”, Prof. Luca Caracoglia, Northeastern University Boston, MA, USA. 26th November 2015, University of Perugia.
- Seminar “New Equilibrium Methods for Masonry Vaulting”, Prof. John Ochsendorf, Massachusetts Institute of Technology (MIT). 25th November 2015, University of Pisa.
- “Course of Signal Theory”, Prof. Ing. Paolo Banelli. February – May 2015, University of Perugia.
- Short course “Mechanics of Porous Media”, Prof. C. Tamagnini. February 2014, University of Florence.
- Conferences**
- “L'evoluzione dei ponti strallati negli ultimi 50 anni”, Dante Lius. 12th November 2015, University of Perugia.
- “Hydrological modelling and flood forecasting: Application in dam safety studies”, Prof. Pablo Duran Barroso, Departamento de Construcción-Escuela Politécnica dell'Universidad de Extremadura. 26th May 2015, University of Perugia.
- “Scalable Network of Flexible Strain Gauges for Mesosensing”, Dr. Simon Laflamme, Iowa State University. 21st May 2015, University of Perugia.
- “Strength and Capacity of CHS and SHS Tubular Columns Filled with Concrete”, Prof. Rui Carneiro Barros, Università di Porto. 3rd June 2015, University of Perugia.
- “Comparisons of s Tall Building Wind Response with and without a TMD”, Prof. Rui Carneiro Barros, Università di Porto. 3rd June 2015, University of Perugia.
- “Semi-Active Control of Vibration with MR Dampers”, Prof. Rui Carneiro Barros, Università di Porto. 4th June 2015, University of Perugia.
- “Most recent computational advances on modelling successfully MR dampers: (a) Neuro-fuzzy modelling of a sponge-type MR damper; (b) Seismic response reduction of building structures using a semi-active control system based on a brain emotional learning controller”, Prof. Rui Carneiro Barros, Università di Porto. 4th June 2015, University of Perugia.
- “Sensing function and electromechanical applications of conductive cement based materials”, Prof. Pedro Garces, University of Alicante. 13th July 2015, University of Perugia.
- “EMI shielding and heating function of conductive cement based materials”, Prof. Luis Garcia Andion, University of Alicante. 13th July 2015, University of Perugia.
- “Computational Thermo-Poromechanics”, Prof. WaiChing Sun, Columbia University. 3rd September 2015, University of Perugia.
- “A new perspective on performance-based design and optimization – the case of wind excited structures”, Ing. Seymour M. J. Spence. May 2014, University of Perugia.
- Terza riunione del Gruppo AIMETA di Dinamica e Stabilità – GADeS 2014. October 2014, University of Florence.