

## **PERSONAL INFORMATION**

**Lo Turco, Massimiliano**

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## **EDUCATION**

2007: PhD in Drawing and Survey for the Conservation of Building and Territorial Heritage. Tutor: prof. S. Coppo, discussed on 24-04-2007, with excellent rating. Department of Structural, Geotechnical and Building Engineering / Politecnico di Torino.

2003: Master Degree in Architecture. Politecnico di Torino.

2001: Master Degree in Building Engineering. Politecnico di Torino.

## **CURRENT POSITION**

Since 2015: Associate Professor. Department of Architecture and Design/ Politecnico di Torino.

## **PREVIOUS POSITIONS**

2012- 2014: Research Fellow, taking part in "INNOVANCE project -Industry 2015", for identifying standardization procedures for the process of construction and representation of virtual building models through the use of BIM methodologies. Politecnico di Torino.

2007-2009: Research Fellow, taking part in "architecture design and interoperability" to investigate issues related to the complexity of the construction process and its phases, with particular attention to those of survey, design and construction. Politecnico di Torino.

## **FELLOWSHIPS AND AWARDS**

2010–2011: Scholarship supported by Cassa di Risparmio di Torino: Scientific coordination of the research project entitled "Green Building Information Modeling: three-dimensional parametric models for sustainable design in the building sector". The results of the research were published in the monograph: Garzino G. (editor), Drawing (and) information. Polytechnic drawing, Maggioli, 2011. Editorial coordination and co-authoring of 7 book chapters.

## **TEACHING**

2007-2015: Contract Professor (since 2015 Associate Professor) in Representation Techniques to the BsC Degree in Graphic and Virtual Design and to the BsC Degree in Architecture; in Automatic Drawing, Parametric Digital Modeling, Building Information Modeling for the Master Degree in Architecture-Construction-City, in GIS and Modeling for Cultural Heritage, for the Master Degree in Architecture for Restoration and Heritage Valorization. Politecnico di Torino.

2004-2020 Workshops, thematic seminars for several Doctoral Colleges and Master of I and II level Politecnico di Torino.

## **ORGANISATION OF INTERNATIONAL SCIENTIFIC CONFERENCE**

2020: Organization of the seminar "Documentation & Digital 3. Knowing and communicating cultural heritage" - 150 participants, Università Roma la Sapienza 12/2020.

2019: Organization of the study seminar "Documentation & Digital 2. Digital strategies for Cultural Heritage" - 100 participants, Politecnico di Torino 6/2019.

2018: Organizing Committee of the International and Interdisciplinary Conference "Digital environments for art and heritage education" Free University of Bozen, Bressanone 07/2018.

2018: Organizing Committee of the "International Conference on Modern Age Fortifications of the Mediterranean Coast" 200 participants, Politecnico di Torino - 18/20-10-2018.

2017: Organization of the 1st International Conference of Image & Imagination— Conference, 200 participants, Free University of Bozen, Bressanone (Work in Progress- November 2017).

2016: Organization of the XII International Conference of Colour and Colourimetry— Conference, 150 participants, Politecnico di Torino.

2015: Participation in the organization of the conference Drawing & City – Culture, Art, Science and Information. XII Congress of UID – Unione Italiana Disegno and XXXVII International Congress of Representation teachers – Conference, 250 participants, Politecnico di Torino.

#### **ACADEMIC RESPONSIBILITIES**

2018- present: Program Director of the Bachelor of Science in Architecture/Architecture.

2015-2018: Representative for International Exchange programs with Europe.

#### **RECENT PARTICIPATION IN SCIENTIFIC COMMITTEES/ DIRECTION OF EDITORIAL SERIES**

Since 2022 Member of the Editorial Board of the Class A journal Agathon- International Journal of Architecture, Art and Design

Since 2019 Direction of the series Digital Landscapes. Digital processes for the representation of city, architecture, product.

Since 2018 Member of the Scientific Committee of the Scientific Journal IMG journal- International Journal on Image, Imagery and Imagination and of the Scientific Journal Dn- Building Information Modeling, Data & Semantics.

Since 2017: Member of the Editorial Board of the Scientific Journal "Diségno", biennial journal of UID -Unione Italiana Disegno and of the Scientific Journal Disegnarecon, University of L'Aquila (Italy). Indexed by SCOPUS.

2016-2018: Member of the Scientific Committee of the International Conference "Color and Colorimetry".

2016- present: Member of the Scientific Committee for the International Workshop 3dModeling&BIM, organized by Università Roma la Sapienza.

2016 Member of the Scientific Committee for the workshop "BRAINSTORMING THE BIM MODEL" organized by Politecnico di Milano.

Since 2012: Reviewer for many international conferences and several scientific journals including: Journal on Cultural Heritage, Journal on Computing and Cultural Heritage, Journal of Civil Engineering and Architecture, Firenze Architettura, Restauro Archeologico, Disegnarecon, Disegno.

#### **SELECTION OF THE MAIN NATIONAL AND INTERNATIONAL RESEARCHES**

2022: **Scientific responsible** for two research collaborations with the Museo Egizio of Turin related to the "H-BIM modelling of some parts of the Egyptian Museum" preparatory to the project of covering of the courtyard of Palazzo dei Nobili that hosts the Museum. 6 months, 33.000 €. **Topic**<: H-BIM modelling of Cultural Heritage.

2017-2019: Principal Investigator of the project B.A.C.K. TO T.H.E. F.U.T.U.RE. - BIM Acquisition as Cultural Key TO Transfer Heritage of ancient Egypt For many Uses To many Users REplayed - SSD: ICAR/17-Drawing; ICAR/06-Topography; ICAR/18-History of Architecture. Academic partner: Cartographic and Land Engineering Department , University of Salamanca in Avila, Spain; Non-academic partner: Fondazione Museo delle Antichità Egizie di Torino. The research project defines a new methodology in which information tools can be used to create 3D databases of small objects, especially those belonging to large museum collections, useful both for scientific research and for the creation of virtual platforms for dissemination. 2 years, 129,500 €. **Topic**: digitization of museum collections, information models, VR/AR.

2018-Present: Digital historical scenic design. Reconstructive digital modeling of the scenographies used in the Passion Representation of Sordevolo. Collaboration with the Passion Museum Association of Sordevolo to initiate processes of reconstructive digital modeling related to the scenographies used in the Representation of the Passion, an event organized by the Popular Theater

Association of Sordevolo, of a centuries-old tradition. 2 years, 15.000 €. **Topic:** digitization of urban environments, reconstructive digital modeling, VR.

2016-2017: Member of the DIMMER European Project (District Information Modeling and Management for Energy Reduction - 2013/2016) referred to a virtuous ICT management system to monitor energy control. 3 years, 3.700.000€. **Topic:** 3D modeling, information modeling.

2014-2016: Member of the EEB Cluster Zero Energy Consumption Buildings in Smart Urban Districts (2013-2015), funded within the National Technology Cluster call - Technologies for Smart Communities, for the use of smart devices and the monitoring of environmental parameters and consumption, with particular attention to historical buildings, through their virtual modeling. 3 years, € 1,400,000. **Topic:** historical buildings modeling, VR.

2017-Present: SEMANTIC BIM modeling system for the conservation and enhancement of Cultural Heritage. Resources: Department of Civil Engineering and Architecture, University of Catania. **Topic:** creation of cognitive information systems through semantically enriched 3D models useful for the conservation and enhancement of Cultural Heritage,

2017-Present: Scientific Responsible for the SH.O.C.K (Sharing Of Construction Knowledge) project with the company COAP, to adapt BIM processes to the control of the construction phase and construction site. 4 years, €44,000. **Topic:** building information modeling.

2017-Present: Scientific Responsible for the BIM ISSUE project (graphic and alphanumeric representation of BIM models for the preparation of information specifications in accordance with UNI 11337:2017). 5 years, €50,000. **Topic:** definition of standards for information modeling.

#### **OTHER COLLABORATIONS**

Augmented Don Quixote Project: Hispanic scholars and Digital Representation Techniques with Fondazione TPE (Teatro Piemonte Europa) and the Saveria Project association who rewrote Cervantes' novel for an innovative "augmented" performance at the "Arturo Graf" Historical Library, as part of the Creative Europe (Culture) program: Q Theatre - Theatrical Recreations of Don Quixote in Europe.