

MARTINA GUASCO

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1. ACADEMIC EXPERIENCE

1.1 RESEARCHES

a.a
2024/
2027

PHD-CANDIDATE

Architecture and Design – XL. Cod. 10458, 2024 – D.M. 630, 24/04/2024
Department of Architecture and Design of the University of Genoa UNIGE, Genoa, Italy – Schmidt Hammer Lassen Architects - SHL, Copenhagen (DK)
Supervisors: Prof. Arch. Christiano Lepratti (Unige), Senior Associate – Head of Innovation . Enlai Hooi (SHL)
Development of methods and lines of research for AI in the prediction of the adaptation of multi-storey buildings with skeleton structure

a.a
2024/
2025

RESEARCH SCHOLAR

URBAN GENERATION - “A Design Approach for Climate Change Adaptation and Mitigation” - NextGeneration EU/PRIN 2022 projects of relevant national interest
a.a 2023/2024,
Ecosystems research Group - Department of Architecture and Design, University of Genoa, Genoa, Italy
P.I. Prof. Katia Perini
Developing front-end tools for mitigation of urban heat island effect by the usage of Nature Based Solutions - Milestones 5/5, Sub-Responsible of computational workflow and group coordination. Investigator on methodologies to address UHI and overheating phenomena in urban environment <https://ecosystemics.eu/research/projects/urban-generation/>

1.2 COLLABORATOR - Teaching methodologies

a.a
2023/
2024
II sem.

THEMATIC EXPERT - COLLABORATOR

ARCHITECTURE STUDIO 2 - “Washing Machines” - ARCHITECTURAL COMPOSITION
a.a 2023/2024, cod. 106512
Prof. Arch. Christiano Lepratti - Department of Architecture and Design, University of Genoa, Genoa, Italy
The studio is run in collaboration with “HouseEurope!” - investigation on Italian bonuses - <https://www.houseeurope.eu/>

a.a
2023/
2024
I sem.

UNIGE DAD COLLABORATOR - PROF KATIA PERINI

Contract of self-employed person - collaborator
a.a 2023/2024 - Prof. Katia Perini
Department of Architecture and Design, University of Genoa, Genoa, Italy
Development of teaching methods and tools carried out under the scientific responsibility of Prof. Katia Perini.

a.a
2023/
2024
I sem.

STUDENTS TUTORING

SUSTAINABILITY TECHNOLOGY - ARCHITECTURAL COMPOSITION
a.a 2023/2024, cod. 106521 - Contract - Art. 33
Prof. Katia Perini - Department of Architecture and Design, University of Genoa, Genoa, Italy

Supporting computational and dynamic analyses of Begato area to establish a new NBS residential building.

a.a
2022/
2023
II sem.

STUDENTS TUTORING

PROGETTAZIONE TECNOLOGICA DEL VERDE IN ARCHITETTURA -

a.a 2022/2023, cod. 84631.- Contract - Art. 33

Prof. Katia Perini - Department of Architecture and Design, University of Genoa, Genoa, Italy

Supporting the students to develop a custom-made NBS construction system for green facade claddings.

a.a
2021/
2022
II sem.

STUDENTS TUTORING

LABORATORIO DI PROGETTAZIONE II B - RESIDENTIAL PARK - a.a 2021/2022, cod. 95256

Prof. Arch. Christiano Lepratti - Department of Architecture and Design, University of Genoa, Genoa, Italy

Supporting the students to develop a “reuse-project” based in Berlin. Conversion of a potential dismissed park house into a residential building.

a.a
2020/
2021
II sem.

STUDENTS TUTORING

LABORATORIO DI PROGETTAZIONE ARCHITETTONICA, URBANA E DEL PAESAGGIO - OASYS LAB - a.a 2020/2021 cod. 83881

Prof. Arch. Christiano Lepratti - Department of Architecture and Design, University of Genoa, Italy.

Supporting the students to develop a “desert city” based in the Douiret Desert by developing self-sufficient strategies for urban settlements

1.3 INVITED SPEAKER FOR ACADEMIC COURSES

April
2023

“Bluff Bodies and Aerodynamic Applications - Presentation of Master Thesis”

Lecture for the course “PROGETTAZIONE TECNOLOGICA DEL VERDE IN ARCHITETTURA” - a.a 2022/2023, cod. 84631.

Prof. Katia Perini - Department of Architecture and Design, University of Genoa, Genoa, Italy

April
2022

“Detailed Design of Suspended Facade - module: SKIN”

Lecture for the course “ LABORATORIO DI PROGETTAZIONE II B - RESIDENTIAL PARK” - a.a 2021/2022, cod. 95256

Prof. Arch. Christiano Lepratti - Department of Architecture and Design, University of Genoa, Genoa, Italy

March
2021

“Natural Cooling Systems in Traditional Iranian Architecture - Case study: Yazd”

Lecture for the course “LABORATORIO DI PROGETTAZIONE ARCHITETTONICA, URBANA E DEL PAESAGGIO” - OASYS LAB - a.a 2020/2021 cod. 83881

Prof. Arch. Christiano Lepratti - Department of Architecture and Design, University of Genoa, Genoa, Italy

1.4 GUEST MEMBER

24th November 2023 **UNIGE member - LA BIENNALE DI VENEZIA 2023**
B+, S+, HOUSEEUROPE!
"A conversation on the speculative real estate market and screening of the short film The Demolition Drama, with economic and ecological models from the collaborative architecture studio B+ and the European citizens' initiative HouseEurope!"

Guest as *UNIGE - DAD, Department of Architecture and Design member (ref. Prof. Arch. Christiano Lepratti)* and member of *HouseEurope! Genoa Team* in charge of seeking collaboration in the Genoa environment (e.g. Unige DAD)

Italian Pavilion - "Mondo Novo" - Teatrino di Palazzo Grassi (San Marco 3260, VE)
Organisers: Fosbury Architecture, Station plus ETH (Zuerich), B plus.XYZ (Berlin), HouseEurope!
Event: <https://spaziale2023.it/eventi/economies>

November 2019 **MSc STUDENT VISITOR - MASTER THESIS RESEARCH**

Student visitors at TU/E Eindhoven to develop CFD models for wind pedestrian comfort evaluation

Building Physics and Services, Department of the Built Environment, Eindhoven University of Technology, Eindhoven, the Netherlands.
Chair: Prof. dr.ir. Bert Blocken, Building Physics and Services, Department of the Built Environment, Eindhoven University of Technology, Eindhoven, the Netherlands.

2. SOFTWARE

Revit Architecture, Autocad 2D, Photoshop, Illustrator, Sketchup, Adobe Premier, Allplan, Envimet, Indesign, Lumion, Rhinoceros, Grasshopper

Italian: mother-tongue

English: C1 + RTF of IELTS Life Skill Tests for UK visa application

German: B1

3. LANGUAGES

4. PUBLICATIONS

1.1 JOURNAL PAPER

Ricci A., Guasco M., Caboni F., Orlanno M., Repetto M.P., Giachetta A., 2022.
"Impact of surrounding environments and vegetation on wind comfort assessment of a new tower with a vertical green park." Building and Environment 207, 108409.
DOI: <https://doi.org/10.1016/j.buildenv.2021.108409>

1.2 CONFERENCE PAPER

Ricci A., Guasco M., Caboni F., Orlanno M., Repetto M.P., Giachetta A.
"Wind comfort assessment of a newly designed tower with a vertical green park." ACWE 2022 – 14th

Americas Conference on Wind Engineering, National Wind Institute – Texas Tech University, Lubbock TX, USA, 17-19 May 2022.

Conference website: <https://www.depts.ttu.edu/nwi/14ACWE/>

Caboni F., Guasco M., Orlanno M., Ricci A., Freda A., Repetto M.P., Giachetta A.

“Experimental and numerical analyses for the comfort optimisation of a newly designed tall building.”

BBAA IX – The 9th International Colloquium on Bluff Body Aerodynamics and Applications, University of Birmingham, UK, 20-23 July 2020.

Website: <https://www.birmingham.ac.uk/facilities/mds-cpd/conferences/bbaa-2020/index.aspx> -

*CANCELLED DUE OF COVID PANDEMIC

Martina Guasco, Martina Orlanno, Chiara Piccardo, Andrea Giachetta, Ambrose Dadoo

“Design optimisation of a building attached sunspace through experimental monitoring and dynamic modelling.” NSB 2020 - 12th Nordic Symposium on Building Physics - Tallinn, Estonia, 6-9 September 2020

DOI: <https://doi.org/10.1051/e3sconf/202017203010>

5. GRANTS/AWARDS

November 2020 **THE PLAN|Contract Vol.1 - Project Publication in Architectural Magazine**

The Vines: Design and Local Culture | Hembert Penaranda Officina Architetti

Location: San Miguel de Allende, Mexico

Client: Tamayo Desarrollos

Architect: Hembert Penaranda - Officina Architetti

Design Team: Hembert Penaranda, Fernando Arteaga, Andres Morales, Iria Avanzini, Olena

Fedosenko, Sergii Borodenko, Martina Guasco, Luis Coral, Laura Botero

Website: <https://www.theplan.it/eng/contract/001/the-vines>

Sept. 2014- Sept. 2017 **IANUA - Grant for merit**

IANUA - Institute of the Advanced Study of Genoa University

Winner of IANUA scholarship merit grant - financial support - eq. 9.000 euro

November 2016 **“La casa sull’acqua”**

Transformation of existing floating terraces in Genoa Port into precast house modules- 1st Classified,

Team: Martina Guasco, Luca Viglierchio, Ayla Schiappacasse

UNIGE - DAD, Department of Architecture and Design, Fondazione Promozione Acciaio, Cogi Srl

6. COMMUNITY BUILDING

2023-ongoing **HouseEurope! - EUROPEAN CITIZENS’ INITIATIVE (ECI)**

Genoa-based member

“HouseEurope is an EU citizens’ initiative for an EU legislation that boosts the renovation of existing buildings and stops their demolition driven by speculation.”

Program launched by B.plus.xyz (Berlin, DE), Station + (ETH Zuerich, CH), Initiators:

Arno Brandlhuber, Olaf Grawert - <https://www.houseeurope.eu/>

- Community builder responsible for fostering collaboration between administration and academic partners and the HouseEurope! network
- Initiated and finalized an academic partnership between UNIGE-DAD and HouseEurope! in March 2024. Scientific Responsible: Prof. Arch. Christiano Lepratti - UNIGE DAD
- Thematic expert and content coordinator of ARCHITECTURE STUDIO 2 - "Washing Machines" a.y. 23/24 - in collaboration with HouseEurope! Topics include Italian legislation on Social Housing, Italian Bonuses, and Adaptation Solutions.
- Responsible coordinator for dissemination events: "Learning From Italy, Arno Brandlhuber, Giacomo Ardesio", UNIGE DAD-Fondazione degli Architetti di Genova, HouseEurope! Genoa, Italy, 07/06/2024

2017

ISA IANUA STUDENTS ASSOCIATION

Founder member
Students and Alumni Association of IANUA - Institute of Advanced Study of University of Genoa.

"IANUA is a multidisciplinary community where you can grow, live and dedicate yourself to building your future. We promote the publication and dissemination of members' intellectual work.

We organise informative and educational events for members and the general public. We deal with issues concerning work, the university and the future. We promote the image and professional careers of members and other deserving people."

<https://www.isaianua.it/>

7. EDUCATION

Sept. 2017-
April 2020

MASTER'S DEGREE IN ARCHITECTURE

University of Genoa, Department of Architecture and Design
Mark: 110/110 with honours

Master's Thesis: "Experimental and numerical analyses for the comfort optimisation of a newly designed tall building"

Supervisors:

- Prof. A. Giachetta - Department of Architecture and Design, *University of Genoa, Italy*

- A. Ricci - Building Physics and Services, *Department of the Built Environment, Eindhoven University of Technology, Eindhoven, the Netherlands.*

- Prof. M. P. Repetto - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa, Italy
- Arch. Hembert Penaranda - *Officina Architetti*
- Arch. Iria Avanzini - *Officina Architetti*
- Ing. A. Freda - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa, Italy
- D. Burlando - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa, Italy)

Sept. 2014-
December 2017

BACHELOR'S DEGREE IN ARCHITECTURE

University of Genoa, Department of Architecture and Design

Mark: 110/110 with honours

Bachelor's degree: "Performance of Solar Passive Heating Systems: Simulations with VIP-Energy Software"

Supervisors:

- Prof. Andrea Giachetta - Department of Architecture and Design, University of Genoa, Italy
- Arch. PhD. Chiara Piccardo - Department of Architecture and Design, University of Genoa, Italy
- Prof. Ambrose Dodoo - Department of Built Environment and Energy Technology, Linnaeus University, Sweden

Sept. 2014-
Sept. 2017

HIGHER EDUCATION - IANUA

Institute for Advanced Study of the University of Genoa

STS - Science and Technologies for Sustainability

1st. Level Diploma

STS "develops conceptual approaches, awareness and culture on the topic of transition towards a different model of sustainable development across social, environmental, industrial and economic dimensions. Through a multidisciplinary approach designed and implemented in cooperation with organisations and enterprises, it stimulates the ability to collect and contextualise international principles, methods and guidelines in local and national contexts."

Topics:

- Sustainable design: definition, critics of sustainable design. Multidisciplinary approach.
- Coastline sustainable management: monitoring, safety, rules.
- Biorefinery: Food, packaging, pharma products quality assurance.
- Maritime Sustainability: resources, technologies, rules.
- Dott. Riccardo Casale: Nuclear Legacy & Sustainable Development: decommissioning and radioactive waste management.

Supervisors: Franco La Cecla, ARUP, ARPAL, DeFENS, ABS, Lloyd's, M. Barolo
Chairman of Engineering UNIPD, POLIMI, Regione Liguria

<https://ianua.unige.it/>

8. WORK EXPERIENCE AS AN ARCHITECT

November 2022-
Decembre 2023

ARCHITECT

CALIGO DESIGN STUDIO - Margherita del Grosso, Matteo Orlandi
Genoa, Italy

- Project-responsible and detailed architect

Scale: 700 mq up to 15.000 mq, building adaptation (logistics, factories, cultural centres).

Phases: concept, preliminary, final, detailed design and construction documents.
eq. to: HOAI Leistungsphasen 1-2-3-4-5-6-7-8-9

January 2021-
Ongoing

FREELANCE ARCHITECT - INDEPENDENT ARCHITECTURE PRACTICE

Martina Guasco
Genoa, Italy

Licencend Architect - Ordine degli Architetti Pianificatori Paesaggisti e Conservatori della Provincia di Genova - N° 4773

Phases: concept, preliminary, final, detailed design and construction documents (commercial/retail/external collaborator)

eq. to: HOAI Leistungsphasen 1-2-3-4-5-6-7-8-9

Online portfolio: <https://mala-chite.com/>

June 2021-
Sept. 2022

ARCHITECT

Büro 213 - Architekten
Berlin, Germany

- Project responsible/team coordinator and detail architect for wood construction

Holzbau für Wohnungsbau: Neubau/Erweiterung/Umbau/Dachaufstockung

Phases: concept, preliminary, final and detailed design

eq. to: HOAI Leistungsphasen 1-2-3-4-5

June 2020-
June 2021

ARCHITECT - OFFICE MANAGER - PERSONAL ASSISTANT OF THE CHIEF ARCHITECT

Hembert Penaranda - Officina Architetti
Genoa, Italy

- Project-responsible and detailed architect
- Office administration responsible for Officina Architetti SRL (cashflow and office sensible data Genoa/Milan)
- Administration documents responsible for competitions and construction phases (Italy)

Mixed-use buildings, towers, villas, sports amenities, masterplan and urban design-
(CAD-BIM Revit, from 1000 sqm to 40.000 sqm) - Colombia and Italy
Phases: concept, preliminary, final and detailed design
eq. to: HOAI Leistungsphasen 1-2-3-4-5-6-7-8-9

2016-2019

JUNIOR ARCHITECT

- Studio di Architettura ed Ingegneria Gnudi
May 2019 - October 2019, Genoa, Italy
- Hembert Penaranda - Officina Architetti
January 2018- January 2019, Genoa, Italy
- MOA - Matteo Orlandi Architetto
January 2016-Sept. 2017, Genoa, Italy

9. SELECTED PROJECTS AS FREELANCE ARCHITECT

MOTOR VILLAGE - GROSIO CENTRE

Mixed-use building
Factory refurbishment - ex-Motor Village
Milan - Italy
Area: 40.000 sqm
Role: architect at Officina Architetti (team member)
Phases: preliminary and final design - eq. to
Leistungsphasen 3-4 (HOAI)

EX CINEMA NAZIONALE

Theater-Cultural Centre
Genoa, Italy
Area: 1200 sqm
Role: Project Architect at CALIGO
Phases: feasibility design - eq. to Leistungsphasen 1-
2-3 (HOAI)

DACHAUFSTOCKUNG - Jablonskistr.

Holzbau - Dachaufstockung, Erweiterung,
Landschaftplanung
Berlin, Germany
Role: Architect and team coordinator at Büro 213
Phase: detailed design - eq. to Leistungsphasen 5
(HOAI)

STADIO FLAMINIO competition

Rome, Italy
Role: Architect and administration manager at
Officina Architetti
Phases: competition - Phase 1

STADIO LUIGI FERRARIS - Marassi

Genoa CFC - Calcio
Genoa, Italy
Role: architect at Officina Architetti (team member),
client communication responsible
Phases: preliminary design - eq. to Leistungsphasen
1-2-3 (HOAI)

ASTER - STRATEGIC PLANNING

Factories and services allocations
Genoa, Italy
Area: 15.000 sqm
Role: architect at CALIGO
Phases: preliminary - eq. to Leistungsphasen 1-2
(HOAI)

**UMBAU UND ANBAU - Wohnhaus am
Esenpfhul**

Holzbau - Anbau, Umbau
Berlin, Germany
Role: Architect and team coordinator at Büro 213
Phase: detailed design - eq. to Leistungsphase 5
(HOAI)

KRAKOW AM SEE

Holzbau, Neubau, Landschaftplanung
Krakow am See - Germany
Area: 10.000 sqm
Role: Architect and Design Coordinator at Büro 213
Phases: concept design, eq. to Leistungsphase 1
(HOAI)

IBM TOWER

Colombia
Role: architectural designer at Officina Architetti
Phase: concept - eq. to Leistungsphasen
1-2(HOAI)

THE VINES- CHATWAL HOTEL

San Miguel de Allende - Mexico
Role: architectural designer
at Officina Architetti (Team member)
Phases: preliminary and final design
eq. to Leistungsphasen 2-3-4 (HOAI)

WATERFRONT DI LEVANTE - WATERWAY

Detailed design for waterways and piers
Genoa - Italy
Role: architectural designer at Studio Gnudi
Phase: detailed design - eq. to Leistungsphase 5
(HOAI)

91-15 - Mixed-use tower

Facade design - High Rise building
Bogotá - Colombia
Role: architect at Officina Architetti (Team member)
Phases: preliminary and final design - eq. to
Leistungsphasen 2-3-4 (HOAI)

PARCO DEL PONTE

Genoa, Italy
Role: architectural designer at Studio Gnudi,
p.p.: Topotek, Labics
Phases: competition - Phase 1

RIVANA- Business Park

Mixed-use towers/headquarter
Mellin- Colombia
Role: architectural designer at
Officina Architetti (team member)
Phase: final design - eq. to Leistungsphase
4 (HOAI)