



ROBERTA SALIERNO

Architect - PhD candidate

ABOUT ●

I am a fresh graduated Architect and PhD candidate with a deep interest in everything concerning Architecture, Technology, material knowledge and innovation. My goal is to keep developing myself in terms of career and personal growth, explore new ways of designing, trying to take in consideration every aspect of this job, from the attention to the raw materials to the fabrication methods, from the concept to the building processes.

LANGUAGES ●



ITALIAN



ENGLISH



SPANISH



GERMAN

EDUCATION ●

Nov. 2022 /
ongoing

DOCTORATE - PhD

Management Engineering / Architecture

Politecnico di Milano

“Scaling-up the use of new sustainable materials in the construction industry”

Sep. 2019 /
Apr. 2022

MASTER DEGREE - MSc

Architettura - Ambiente Costruito - Interni

Politecnico di Milano - 110 / 110

Thesis title: Computational design and digital fabrication of a smart acoustic wall

Abstract: Noise and acoustical discomfort can damage people's physical and mental health. This work focuses on developing a hybrid system, applied in the architecture and construction framework, capable to adapt and actively respond to the performance and improve the noise abatement in a given space. The goal is to use digital fabrication to produce blocks, the shape of which is optimized to perform in a passive way and to integrate a responsive component, that is capable of absorbing noise actively. The project is algorithmically generated using computational design, developed utilizing Grasshopper. The purpose, in terms of passive noise control, is accomplished using passive ducts controlled by Kangaroo2. Moreover, several tests have been carried out to improve the printing process and controlling and reducing the material waste, time of printing and costs. In the second phase, the effectiveness of the ducts was simulated, in order to obtain evidences of improved performance in a closed space.

Sep. 2016 /
Sep 2019

BACHELOR DEGREE - BSc

Scienze dell'Architettura

Università degli Studi di Napoli, Federico II - 110 / 110 cum Laude

Thesis title: Progettazione parametrica e fabbricazione digitale di un padiglione

CERTIFICATES ●

ENGLISH LANGUAGE

ISE II - B2

Trinity College

EXPERIENCE ●

Feb. 2022 /
Mar. 2022

INTERNSHIP

Material Balance Research, Saperlab
Politecnico di Milano

Main activities: computational 3D modelling, geometric and material exploration, digital additive manufacturing

Feb. 2019

INTERNSHIP

Gnosis Progetti
Napoli

Main activities: grafical representation, technical drafting

PUBLICATIONS ●

Aug. 2022

Ronconi, I.; Salierno, R.; Liu, L.; Giglio, A.; Ripamonti, F.; Paoletti, I. Numerical and Experimental Validation of Active Vibration Control Logic Performance of a Hybrid Noise Control-Based Brick. *Acoustics* 2022, 4, 720-732. MDPI (Special issue: Innovative Design and Applications of Materials for Acoustically Performative Indoor and Outdoor Environments II) Available at: <https://doi.org/10.3390/acoustics4030043>

WORKSHOPS & COMPETITIONS ●

Jun. 2021

Intensive workshop MInDS: Milano Intensive Design Studio

"2026 Olympic games and the city: the challenging urban regeneration of Milano Porta Romana railyard"

Mar / May
2020

International Architecture Competition, Chiesa Diruta, Grottole, Matera

"Reuse the fallen church"

SKILLS ●

2D / 3D
modelling



AutoCad



Revit



Rhinoceros



SketchUp



Computational
& programming



Grasshopper



Phyton



Grafical
representation



Photoshop



Illustrator



InDesign



Ms Office env.



Rendering



Lumion



V - Ray



Digital
fabrication



Ultimaker Cura



- Effective communication
- Leadership
- Conflict resolution
- Active listening and support
- Teamwork
- Time management
- Project management
- Productivity
- Multitasking
- Attention to details
- Meeting deadlines
- Strategic planning

- Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanta riguarda il trattamento dei dati personali).

- Autorizzo la pubblicazione del Curriculum Vitae sul sito istituzionale del Politecnico di Milano (sez. Amministrazione Trasparente) in ottemperanza al D.Lgs n. 33 del 14 marzo 2013 (es.m.i.)