

Giovanni Alessandro Secco

sample portfolio
as of December 2024

About Me



Master's graduate in Building Engineering and Architecture from Politecnico di Milano, with expertise in structural design and technical detailing. Originally from Transacqua, in the Italian Dolomites, and currently based in Milan and Odense.

During the latter part of my academic career, I focused deeply on the technical aspects of architecture, specializing in structural design and the development of technical details, areas I continue to concentrate on in my current employment.

Throughout my studies and work, I have honed my expertise in design and digital representation techniques for design elements and architectural projects.

I am passionate about the multidisciplinary intersections of architecture with other fields, seeking to explore innovative, sustainable solutions that merge technical precision with creative ambition.

This is a sample portfolio that includes a series of select images from my most recent projects. More information on these projects and full work extracts can be requested to me via e-mail at the address below.

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Phone: +39 3453383031
+81 8049004628

Page 4-5 **Share Kō Kusei - Master thesis in Building Engineering and Architecture**

Design of a tower building with structure and envelope technologies, for a co-dividual* space in the Ginza district of Tokyo.

Page 6-7 **House in Colere - Design and Technological Innovation +Dry Stratified Technology Laboratory**

Design of a co-living space in the Bergamasque Alps with DS Technology, integrating technical development as a core design aspect.

Page 8-9 **Modern Art Museum Palma - Architectural Planning L Studio**

How much breathing space does an artwork need?

Project for an art museum in a small lot near a monastery in Palma de Mallorca, Spain.

Page 10-11 **Brera 2.0 "Linear Campus" Theater - Integrated Design Studio in Architectural Technology + Technology Services**

The module aimed at the realization and consequent adaptation to building standards of a previous studio project.

Page 12-13 **Research / Consulting and design activities**

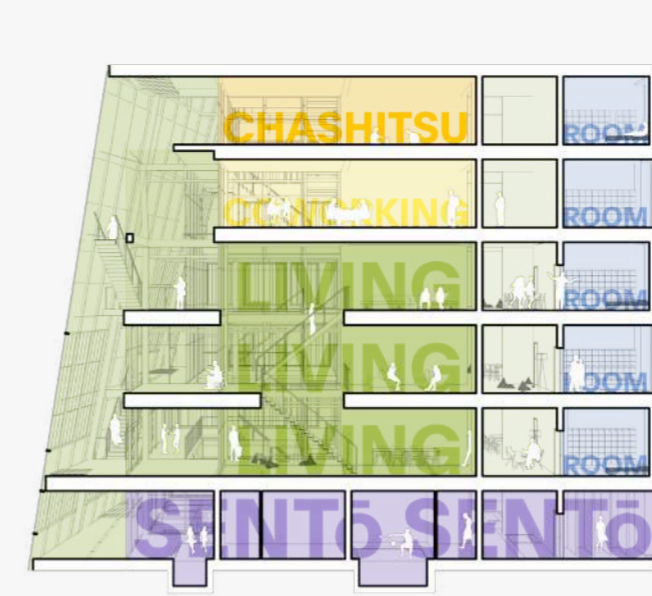
Page 14-16 **Curriculum vitae**



Share Kō Kusei - Master thesis in Building Engineering and Architecture

Design of a tower building with structure and envelope technologies, for a co-dividual* space in the Ginza district of Tokyo.

I worked on:
 Design, Project Visualization, Structural calculations,
 Building engineering, Fire Safety, Technical details,
 Energy Optimisation, Natural Ventilation, Garden
 system, Solar Fitting



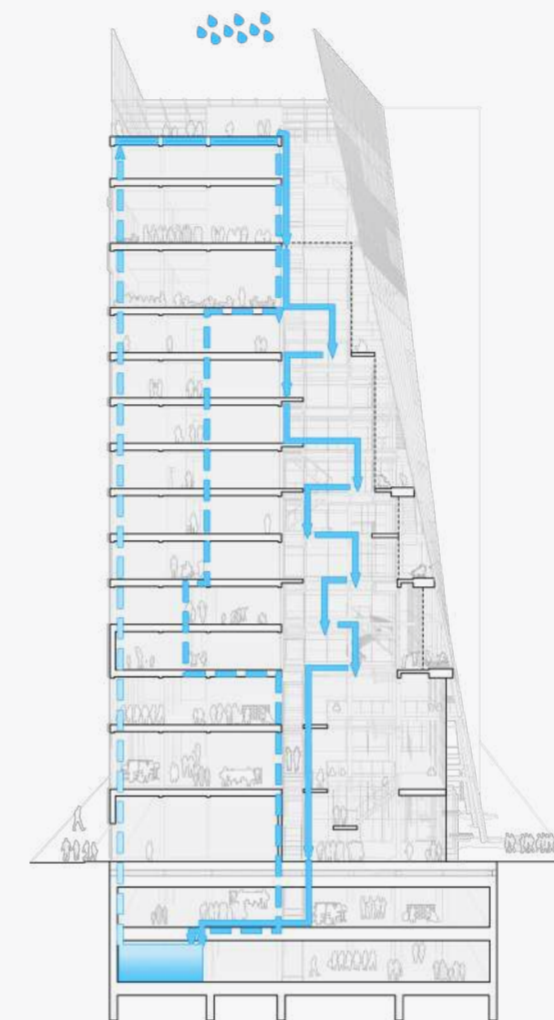
Co-dividual floors



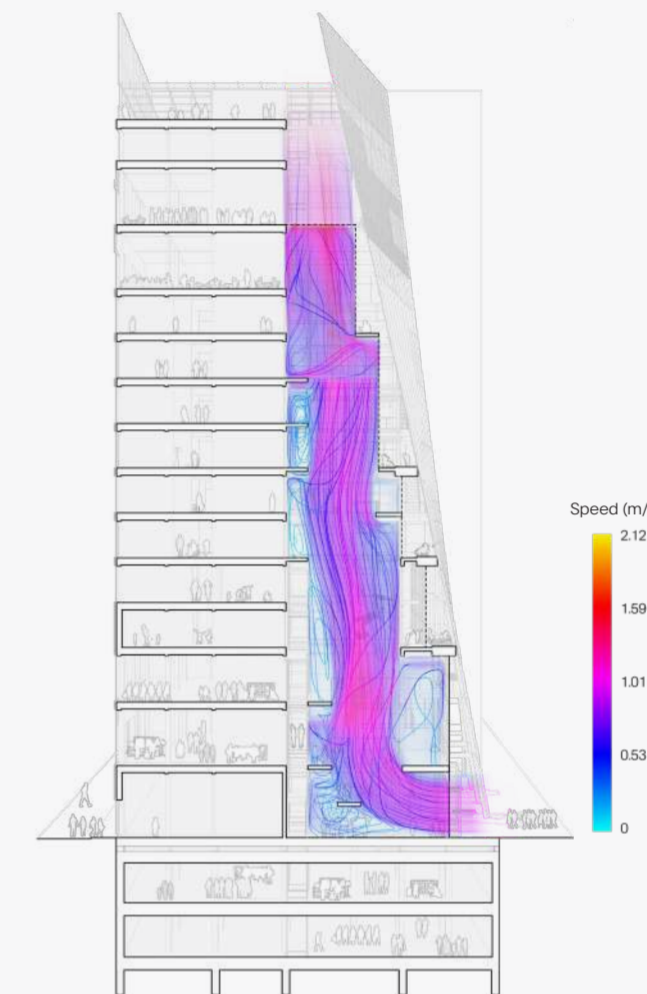
Co-dividual layout



Vertical bamboo forest



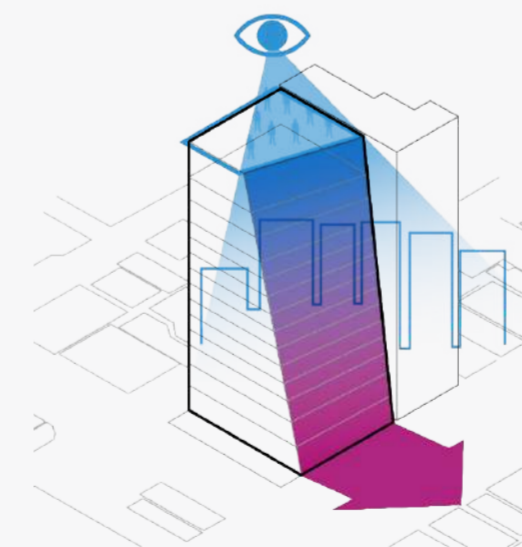
Optimization of the water cycle for the collection and reuse of rainwater.



The ventilation shaft ensures natural ventilation during mild months.



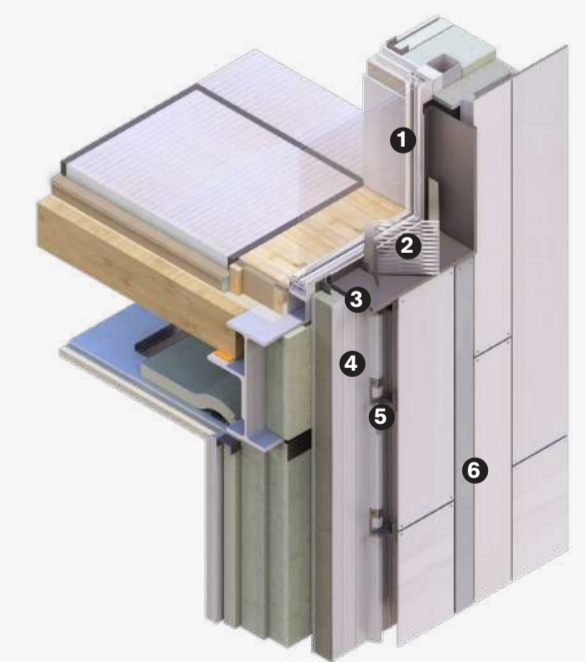
The vertical bamboo forest improves air quality and reduces noise pollution.



Adaptive facade to optimise sqm, natural light and solar gains.

Window opening detail

- 1 Double-glazing window with pvc frame
- 2 Expanded metal sunshade
- 3 Metal flashing
- 4 Sandwich panel
- 5 Arkwall system (Isopan)
- 6 Pressed rockwool panels with screen-printed bamboo pattern



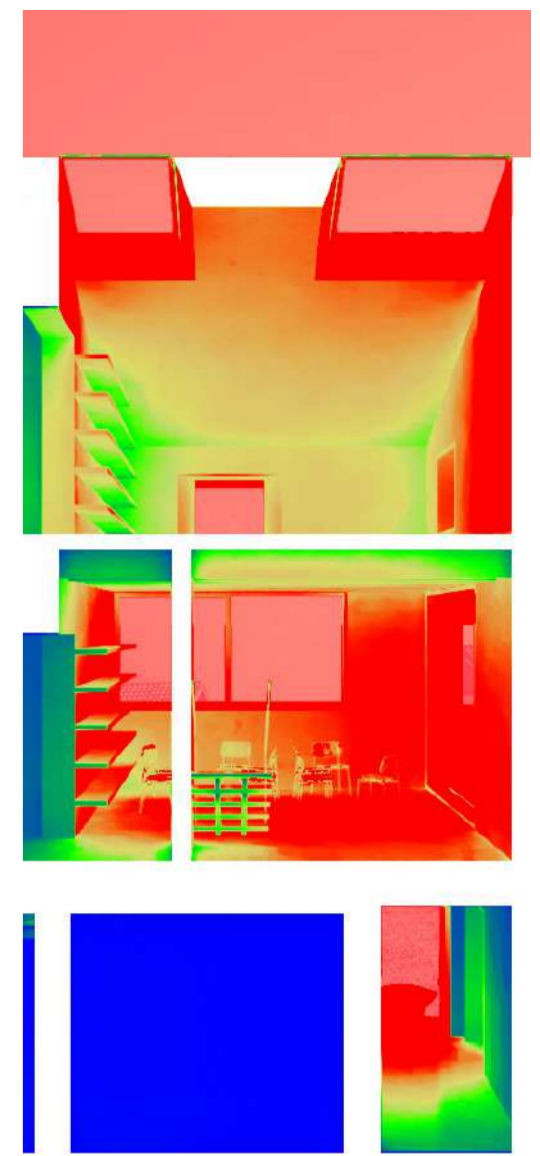
Hybrid system with cross laminated bamboo, steel and dry construction methods.

Share Kō Kusei - Master thesis in Building Engineering and Architecture

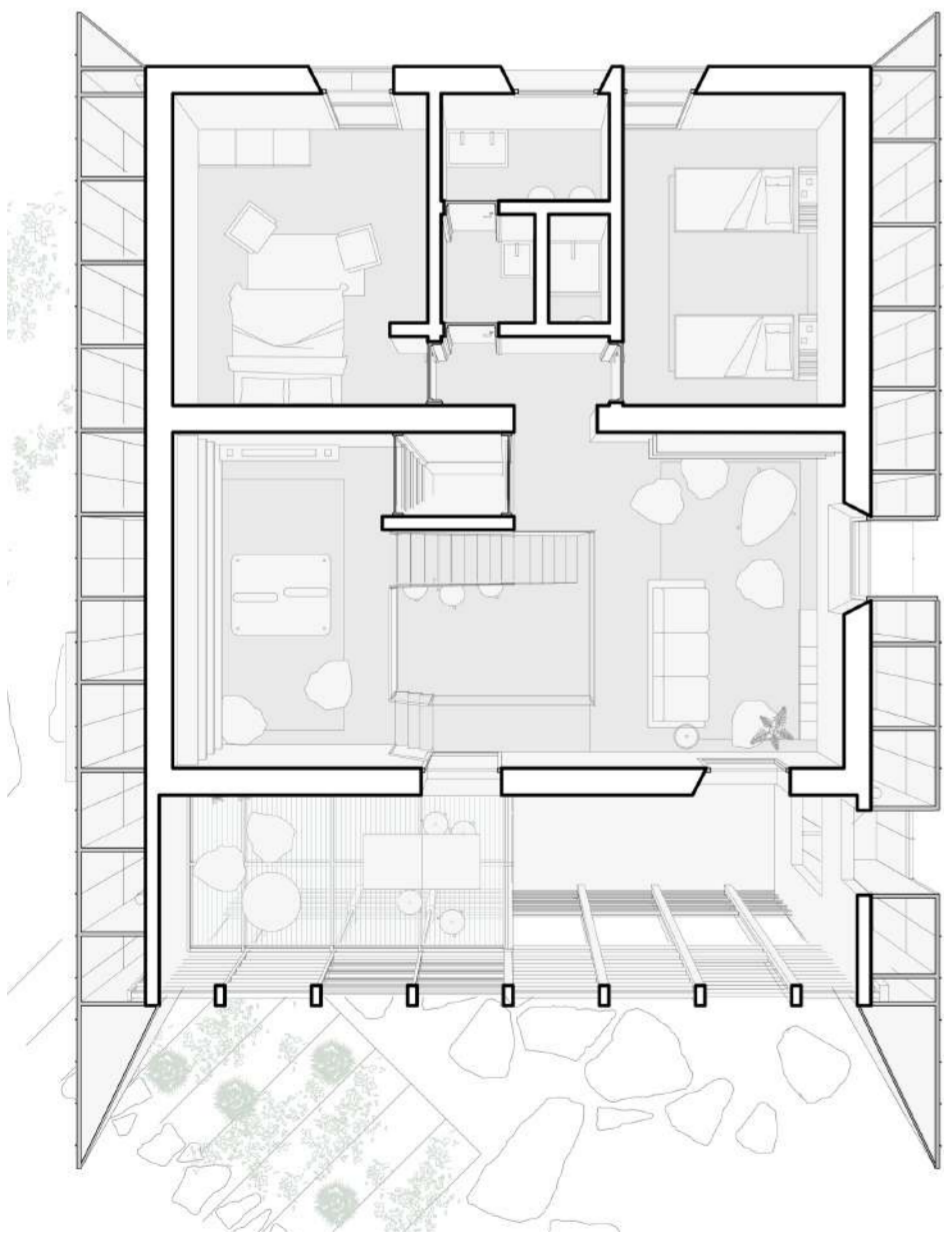
Design of a tower building with structure and envelope technologies, for a co-dividual* space in the Ginza district of Tokyo.



S-E facade



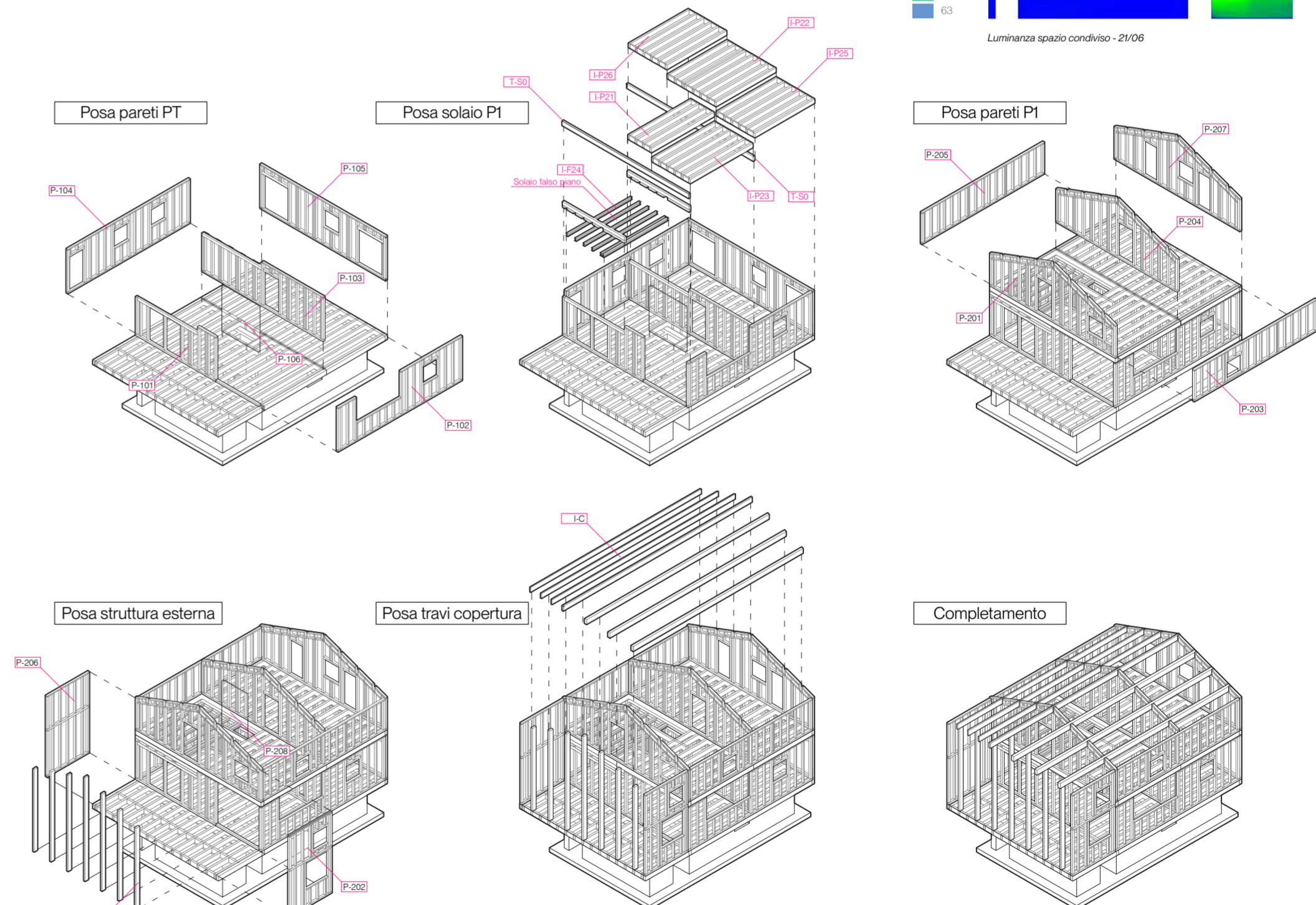
Luminanza spazio condiviso - 21/06



Second floor



Common area section



Construction phases

House in Colere - Design and Technological Innovation +Dry Stratified Technology Laboratory

Design of a co-living space in the Bergamasque Alps with DS Technology, integrating technical development as a core design aspect.

I worked on:
Design, Project Visualization, Structure, Technical Details, Energy Optimisation, Solar Fitting, Construction procedure

House in Colere - Design and Technological Innovation +Dry Stratified Technology Laboratory

Design of a co-living space in the Bergamasque Alps with DS Technology, integrating technical development as a core design aspect.



**Modern Art Museum Palma -
Architectural Planning I Studio**

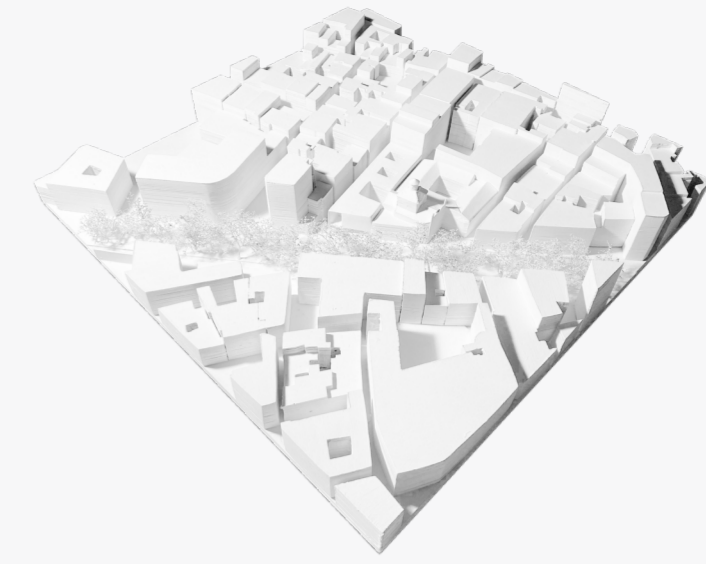
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Project for an art museum in a small lot near a monastery in Palma de Mallorca, Spain.

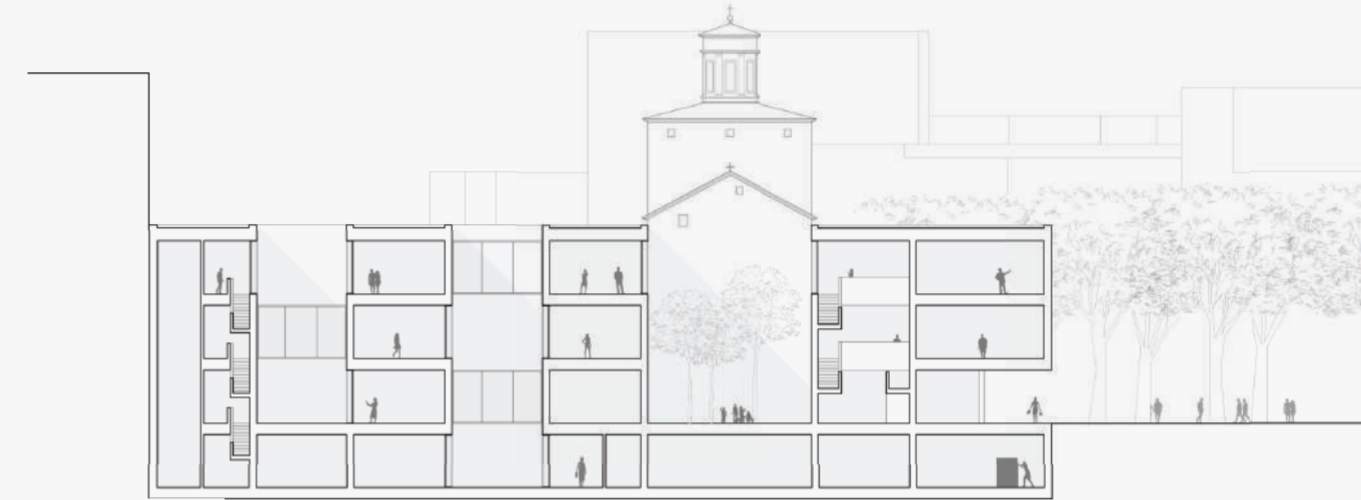
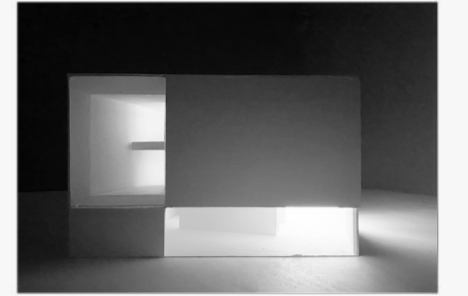
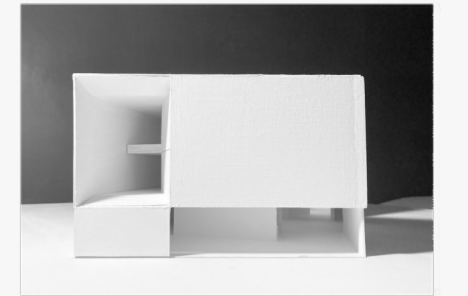
I worked on:
Project Design, Project Visualization, Maquette



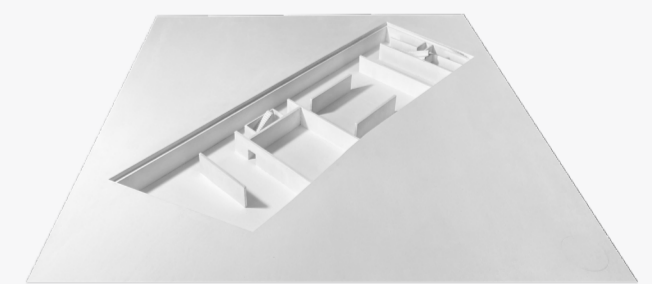
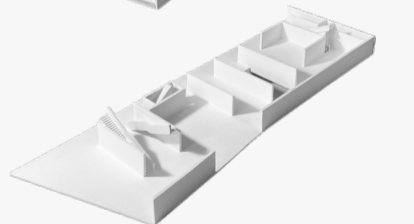
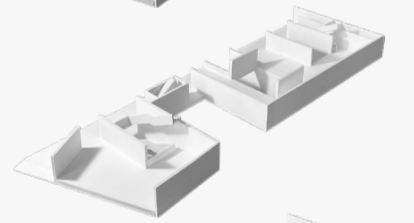
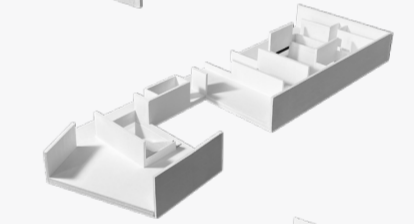
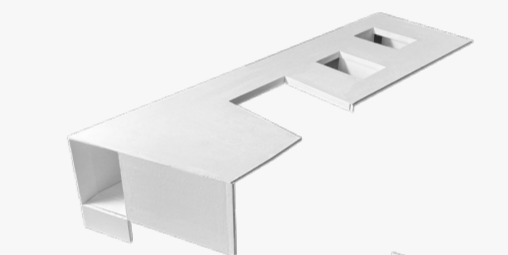
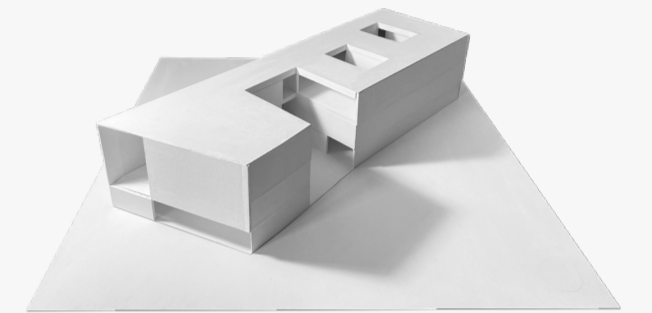
Masterplan



Models



Longitudinal section of gallery spaces and courts



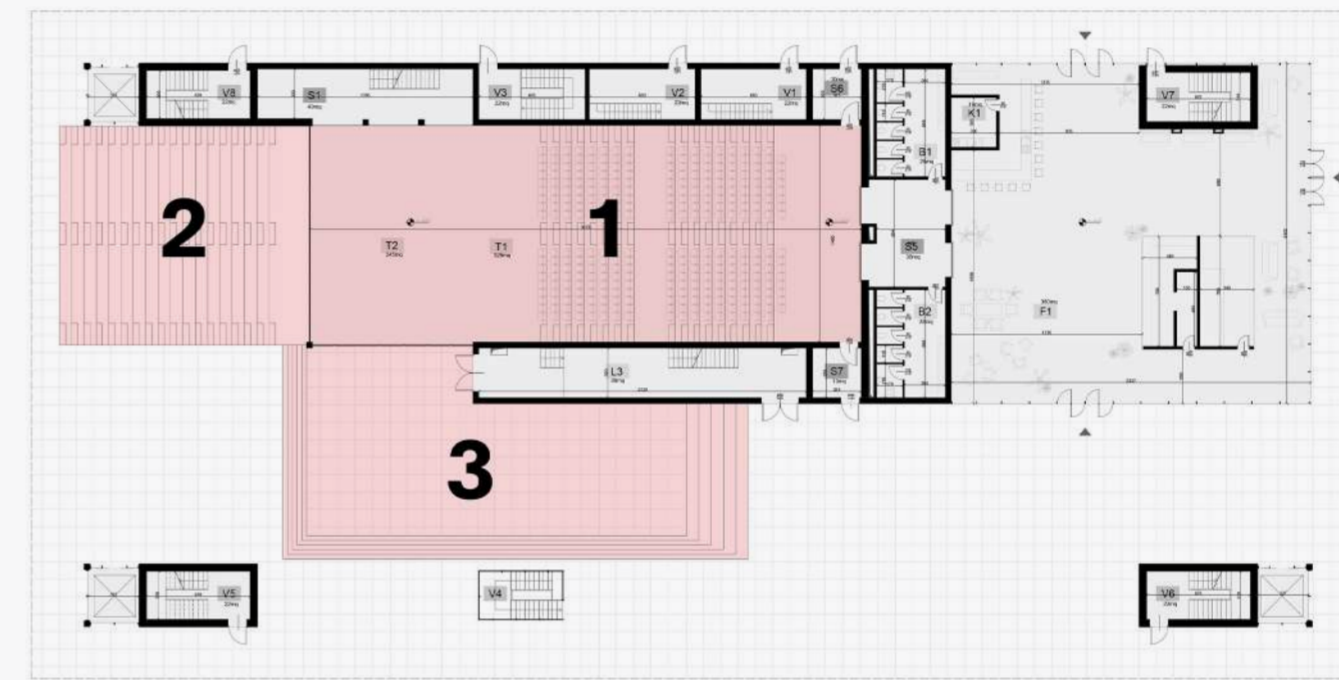
**Modern Art Museum Palma -
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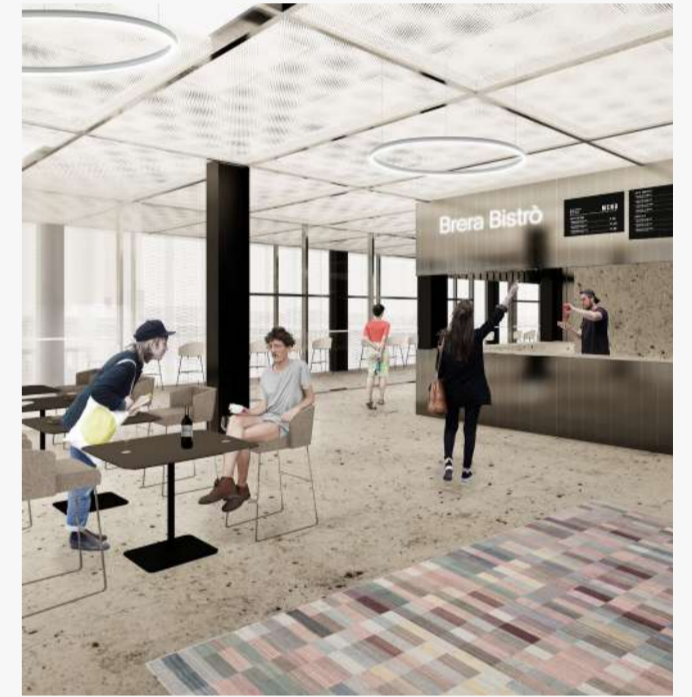
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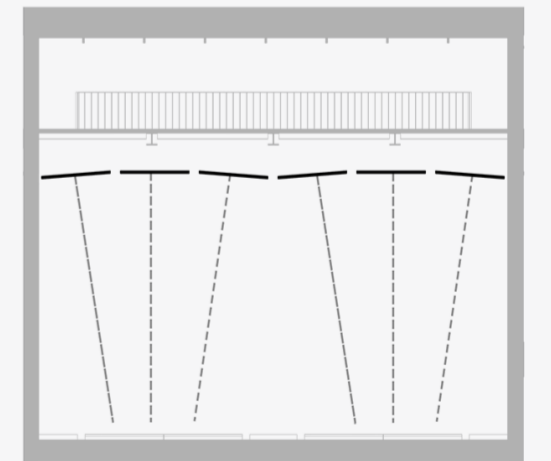
Masterplan



Theater configurations



Main theater acoustics



Brera 2.0 "Linear Campus" Theater - Integrated Design Studio in Architectural Technology + Technology Services

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I worked on:
 Design, Project Visualization, Structure, Foundation,
 Fire Safety, Acoustics, Technical fittings, Energy
 Optimisation, BIM modelling, BIM coordination, BIM
 related calculations, HVAC, Solar Fitting

Brera 2.0 "Linear Campus" Theater - Integrated Design Studio in Architectural Technology + Technology Services

The module aimed at the realization and consequent adaptation to building standards of a previous studio project.

Technical support / Façade engineering

SINAPSI CR², Cremona, Italy

Provided technical support for the façades of a charity daycare project.

2023-2024



Research, Testing and Prototyping

Kyoto Plaster (with Calchera San Giorgio), Valsugana, Italy

Developed and prototyped a bamboo-fiber plaster with enhanced hygroscopic properties.

2023-2024



Concept, Design, and Prototyping

Veneer emergency housing capsule module (with KOBLab), Tokyo, Japan

Conceptualized and constructed a cheap, CNC-fabricated, emergency sleeping module.

2022



Research / Consulting and design activities

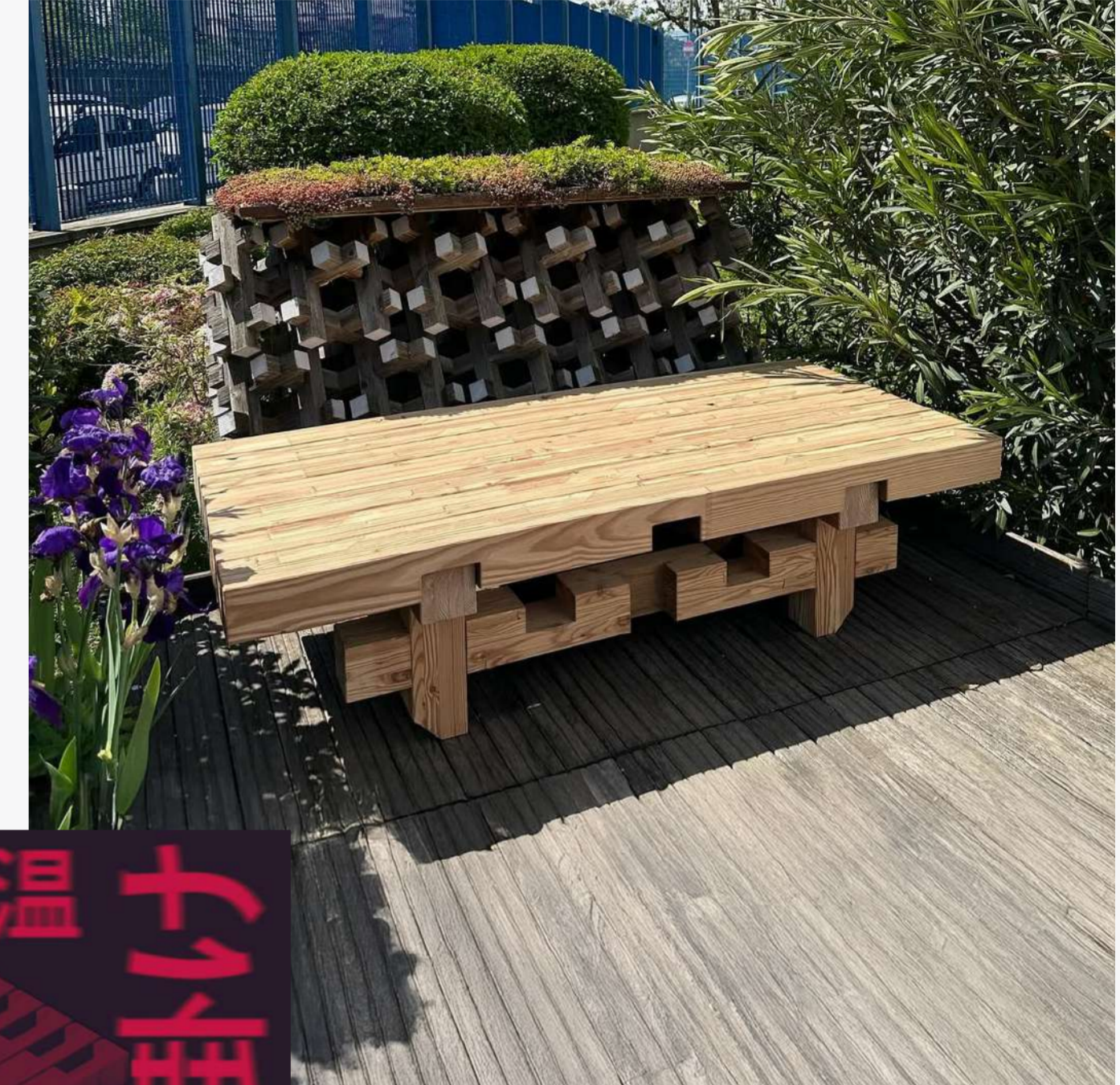
Projects I contributed to, where I applied my design and technical skills, resulted in built prototypes, functional structures, and realized designs in architecture, furniture, and construction.

Design support and assembly

Byobu bench (with Velux Lab and Galloppini Legnami), Milan, Italy

Redesigned wooden joints from the 2015 Milan Expo Pavilion for a modular bench system.

2024



Poster designed by me for the benches, now part of the zen garden at MAO museum of oriental arts in Turin.



Research / Consulting and design activities

Projects I contributed to, where I applied my design and technical skills, resulted in built prototypes, functional structures, and realized designs in architecture, furniture, and construction.

CV

Basic info

Name - Giovanni Secco
Date of Birth - 11.03.1999
Place of Birth - Feltre (BL), Italy

Education

Msc. in Building Engineering and Architecture

Politecnico di Milano, Milan, Italy
Thesys: "Share Kō Kusei" Design of a tower building with structure and envelope technologies, for a co-dividual* space in the Ginza district of Tokyo.
Supervisor: Prof. Marco Imperadori
Co-supervisors: Prof. Thomas Daniell, Prof. Giulio Zani, Ing. Grazia Marrone
2018 - 2024

Exchange researcher

Kyoto University, Kyoto ,Japan
2023

Graduate Exchange

KEIO University, Tokyo, Japan
2022

Scientific High School Diploma

Liceo Scientifico G. Galilei, Trento, Italy
2018

Professional experience

Technical office / BIM Coordinator asst.

Odense Hospital Project Team joint venture CMB/Itinera, Odense, Denmark
Assisted in BIM coordination and technical office tasks for a large-scale hospital project in Denmark. Responsibilities included managing design changes directly with subcontractors, providing site-specific technical details, and supporting civil design activities, also ensuring integration of BIM processes across stakeholders.
sept. 2024 - march. 2025

Architectural Intern

KENGO KUMA & ASSOCIATES, Tokyo, Japan
Contributed to the conceptual design phase of a mixed-use tower in Vietnam and re-envisioned a Slovenian historical landmark. Responsibilities included 3D modeling, visual programming, and design.
jun.-sept. 2022

Architectural Intern

ACTarchitettura Sagl. , Chiasso (CH), Switzerland
Assisted in coordinating large-scale mobility masterplan, contributing technical drawings and strategic planning.
apr.-jul. 2020

Various roles

Hotel Isolabella s.p.a. , Primiero San Martino di Castrozza, Italy
Covered various roles in the family business.
2013-2024

Research / Consulting and design activities

Technical support / Façade engineering

SINAPSI CR², Cremona, Italy
Provided technical support for the façades of a charity daycare project.
2023-2024

Research, Testing and Prototyping

Kyoto Plaster (with Calchera San Giorgio), Valsugana, Italy
Developed and prototyped a bamboo-fiber plaster with enhanced hygroscopic properties.
2023-2024

Design support and assembly

Byobu bench (with Velux Lab and Galloppini Legnami), Milan, Italy
Redesigned wooden joints from the 2015 Milan Expo Pavilion for a modular bench system.
2024

Design support

Panca Karolingia (with Velux Lab and Pedrettu Graniti), Milan, Italy
Optimized granite cutting and detailing for the "Panca Karolingia" bench, now in Vione.
2024

Workshop assistant

Costruire con la Luce (for Milan Design Week), Milan, Italy
Assisted Mario Cucinella (MC A), Giulio Camiz (Velux) and Prof. Marco Imperadori.
2023

Concept, Design, and Prototyping

Vener emergency housing capsule module (with KOBLab), Tokyo, Japan
Conceptualized and constructed a cheap, CNC-fabricated, emergency housing module.
2022

Concept and Prototyping

AR for sharing spaces, Lecco, Italy
Developed a workflow to share architectural models via Meta's Augmented Reality API, enabling interactive visualizations.
2020

Professional Development & Training

Mass Timber Seminar – Italia 2024

Hosted by Rothoblaas, Egna, Italy
Participated in a technical seminar focused on mass timber construction. Covered advanced topics in structural design, installation techniques, and sustainable building practices, with insights from industry leaders on innovative solutions for timber engineering.
2024

Tekla Young - 3rd edition

Hosted by Harpaceas, Milan, Italy
Completed training on Tekla Structures, covering modeling, detailing, and BIM interoperability. Passed a two-phase evaluation (theoretical and practical) and earned a certificate of participation with performance evaluation.
2023

Publications

Arketipo Magazine n° 173, April 2024

Shared Houses Tokyo, Japan
Contributed architectural photography for the article by Prof. Marco Imperadori, showcasing research conducted in Japan.
2024

Skills

Languages

Italian: Native
English: Advanced (C1)
German: Elementary (Actively willing to improve if required)

Communication Skills

Strong communication skills developed through professional collaborations, public presentations, and teamwork in international settings.

Organizational and Managerial Skills

Experience managing clients, site coordination, and other professional tasks.
Skilled at organizing work and delegating tasks within teams.

Leadership

Led multiple teams between schoolwork and in professional settings.

Digital Skills

Advanced in information processing, communication, content creation, and simulations.
Proficient with tools for design, BIM coordination, and technical drawings.

Driver's License: B

Design & Technical Tools

Extensive experience in drawing and modelling.

Autocad
Rhino
Revit
Sketchup

Professional role in BIM coordination.

Revit
Solibri
Dalux
DRofus
NaviateNexus

Strong skills in representation, illustration, and storytelling.

Photoshop
Illustrator

Indesign

Ms Powerpoint

Rendering.

Lumion

Reporting, datasheets and other tasks, for both calculations and management.

Ms Word
Ms Excel

Professional and academic use of Visual programming tools, for modelling, optimisation, simulations and data extraction.

Grasshopper (mainly Ladybug, Dragonfly and Radiance tools)

Dynamo

Various use of simulations tools for fluidodynamics, structural performance, FEM, illumination and energy optimisation.

Ansys suite (mainly Fluent)
Tekla Structures

Midas Gen

Velux Daylight visualizer

Suite ANIT

Therm

Geographical data extraction.

QGis

Background in coding and problem solving through algorithms.

C++

Python

html

Javascript

Interests

I am passionate about exploring and creating at the intersection of technology, design, and art. My interests span across:

Architectural projects where structural and environmental design becomes seamless and active part of the process.

Exhibition, product and fashion design.

Photography, Graphic Design and Illustration.

Coding & AR.

I am genuinely very open to exploring new things and always enter every experience with fresh excitement and wonder.

Thank you for your interest !