

PORT FOLIO

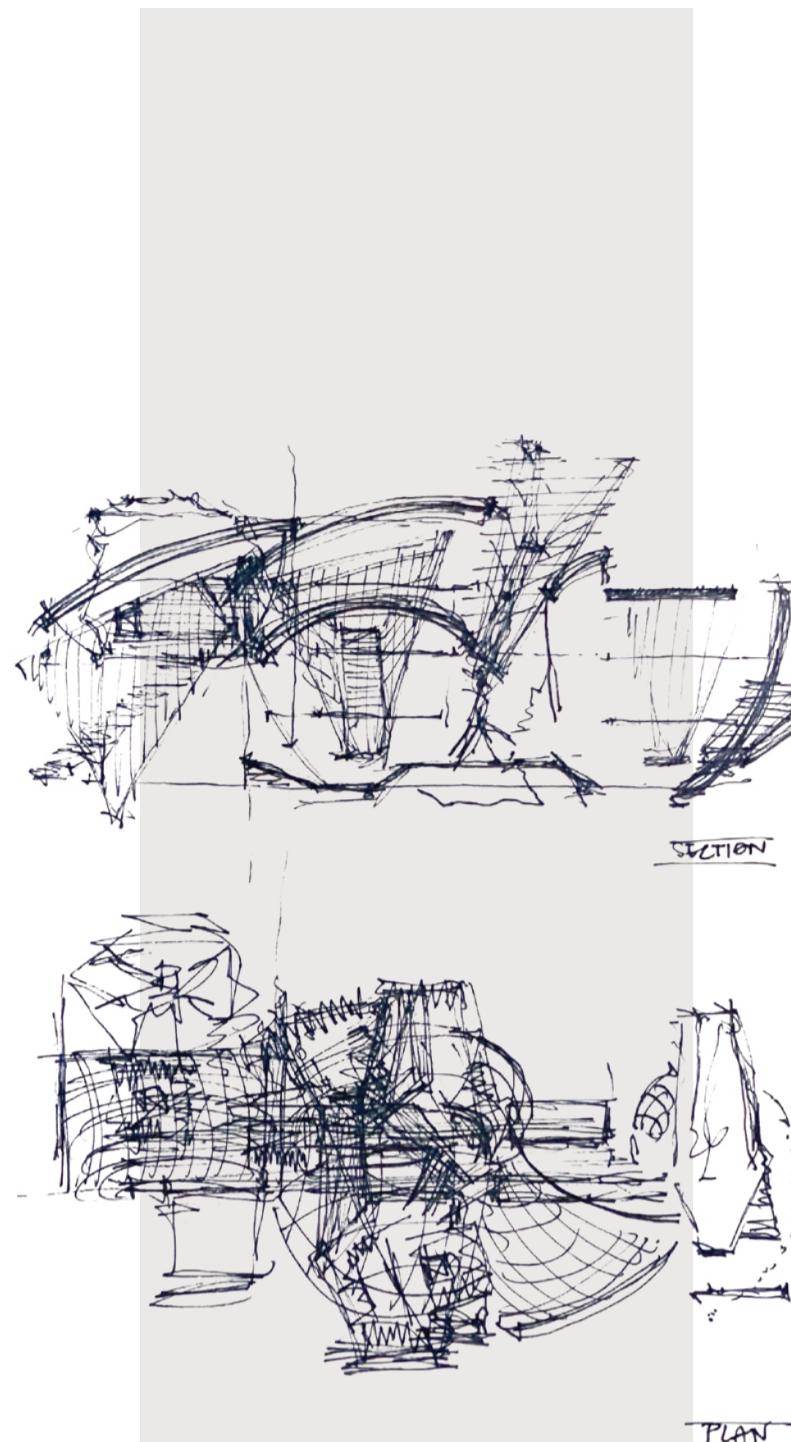


ARCHITECTURE

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This portfolio presents a series of architectural explorations developed through Rhino, Grasshopper, Revit, and the Adobe Suite (Photoshop & Illustrator), demonstrating a rigorous background in research.

My approach to design thinking involves analytical studies with a strong interest in material and structural innovation that inform spatial experience, resulting in an architecture that is both performative and expressive.

The presented projects exemplify my strong interest in the use of varied techniques in conceptual stages, accompanied by computational methods driven by environmental tests and digital fabrication. Process iterations donate a structure to these data-driven methodologies with which I aim to create responsive, efficient, and human-centred spaces.

Condensed CV



Architectural designer with six years of experience training in specializing in high-performance infrastructure rooted in local responsiveness and efficiency. My approach conveys computational methods that emerge from a preliminary understanding of spatial adaptability informed by data-driven design processes.

Beyond the technical, I am passionate about wellbeing and motion, where reflecting on architectural sequences as time-lapse episodes, such as the pause at a glass corner where one can anticipate views, embodies sensing the vitality of the built environment. Driven by the belief that attention to human experience has strengthened my cross-cultural communication skills through international collaboration, I am willing to contribute to an architectural practice that balances performative rigor with expressive clarity.

- MDRM

RELEVANT PROFESSIONAL EXPERIENCE

- MAY, 2025 - SEPT., 2025 Intern for Estates
BRISTOL, UK Architectural Graduate
- SEPT., 2025 - JAN, 2025 Daughters of Africa NGO
THE GAMBIA, AFRICA Lead Architectural Designer, Builder and Teacher
- FEB, 2024 - APR, 2024 RIBA Mentoring Scheme
BRISTOL, UK Mentee at Oxford Architects
- JUL, 2023 - AUG, 2023 Architectural Intern
GRAN CANARIA, SPAIN Architectural Assistant at DobleCero Arquitectos

EDUCATION

- SEPT., 2020 - MAY, 2026 Master's in Architecture (MArch) (RIBA/ARB Part II Accreditation)
BRISTOL, UK University of the West of England (UWE)
- SEPT., 2023 - JUL, 2024 Erasmus + Placement Year
PARIS, FRANCE École Nationale Supérieure d'Architecture de Paris (ENSAPLV)
- SEPT., 2012 - JUL, 2024 Professional Pianist Degree
GRAN CANARIA, SPAIN Conservatorio Profesional de Música (CPMLPGC)
- JAN, 2018, 2019, 2020 Delegate and Artist
THE HAGUE, NETHERLANDS Model United Nations (THIMUN)

LANGUAGES

SPANISH (Native); ENGLISH (Proficient); FRENCH (Proficient); ITALIAN (Basic)

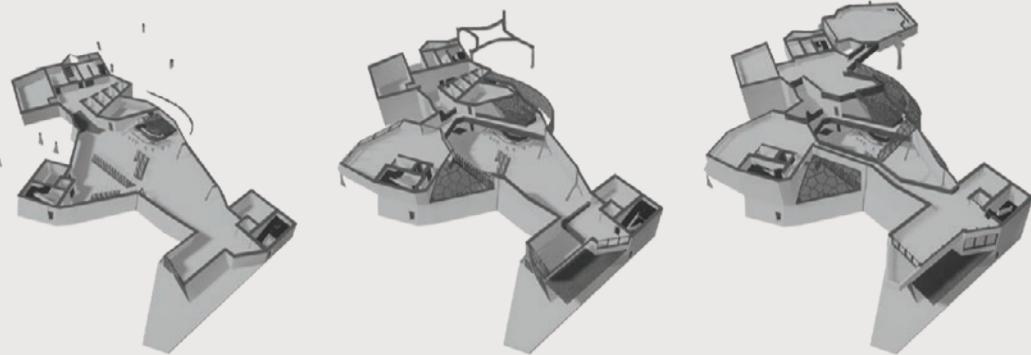
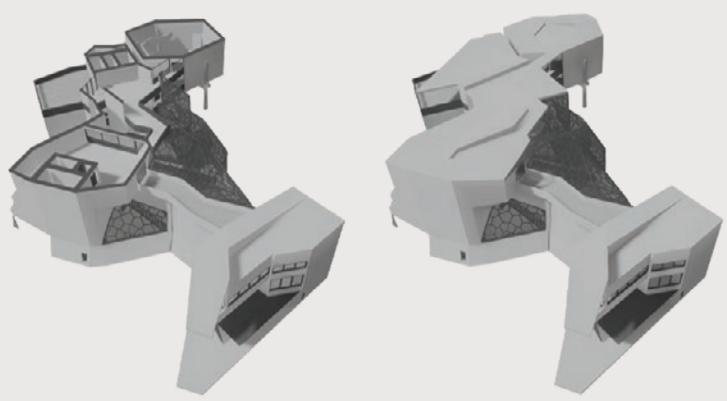
INTERESTS AND HOBBIES

- Athletics (hurdles & marathons), surfing, skiing
- Traveler and gastronomie

AWARDS AND CERTIFICATES

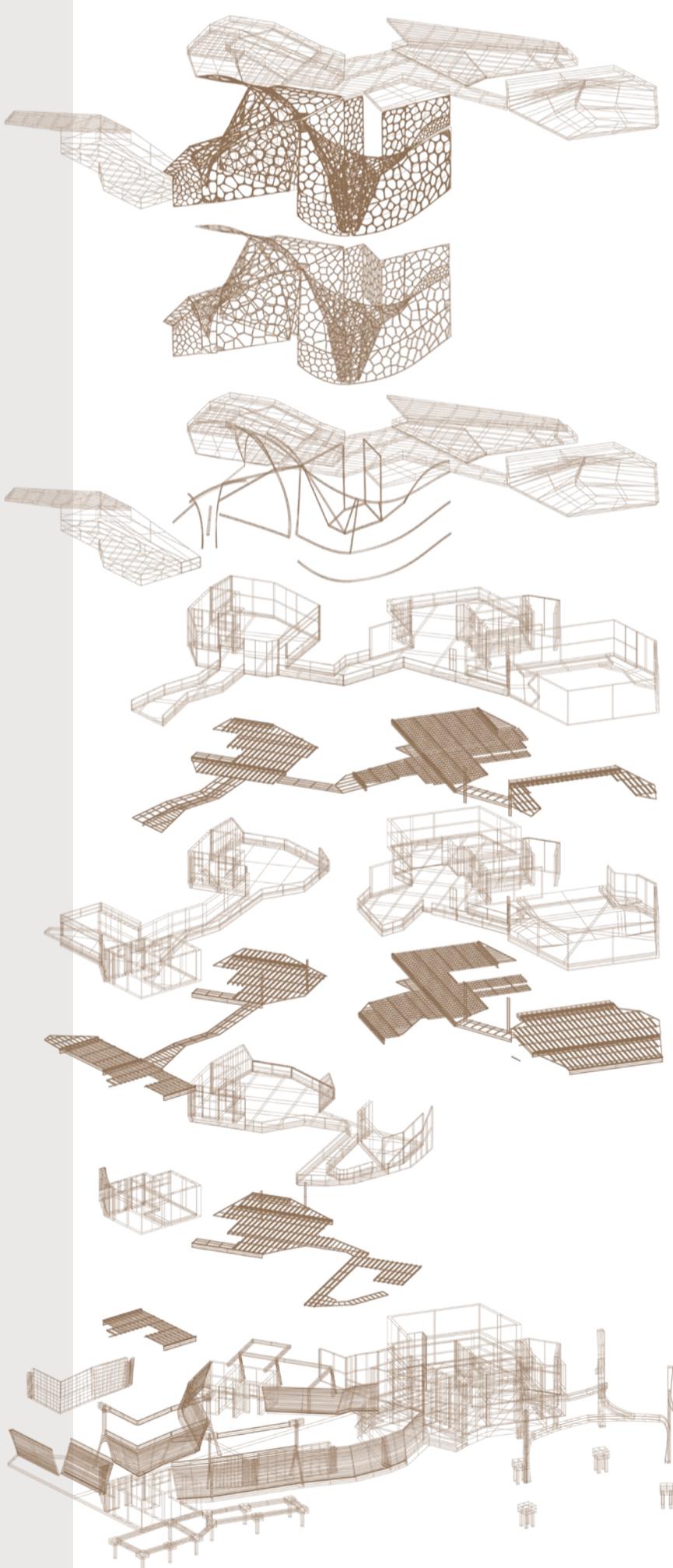
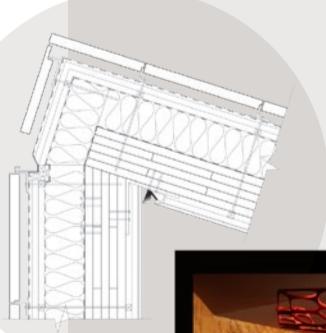
- First place in end-of-degree awards as pianist
- Director's Award for Intercultural Understanding
- Gold Certificate in Zero Carbon Buildings





Acoustics play a crucial role in architectural design, extending from theoretical research to spatial and material applications.

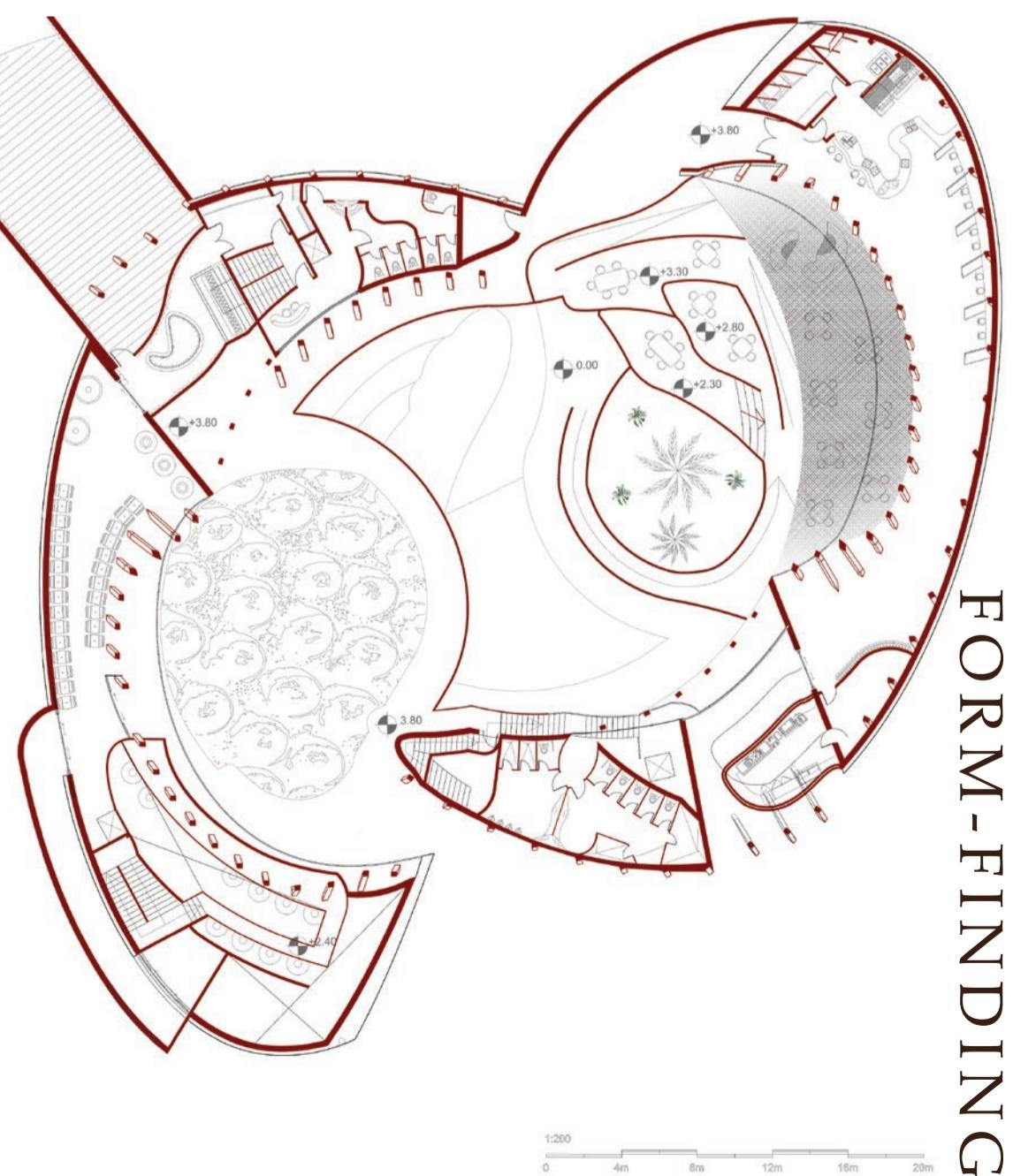
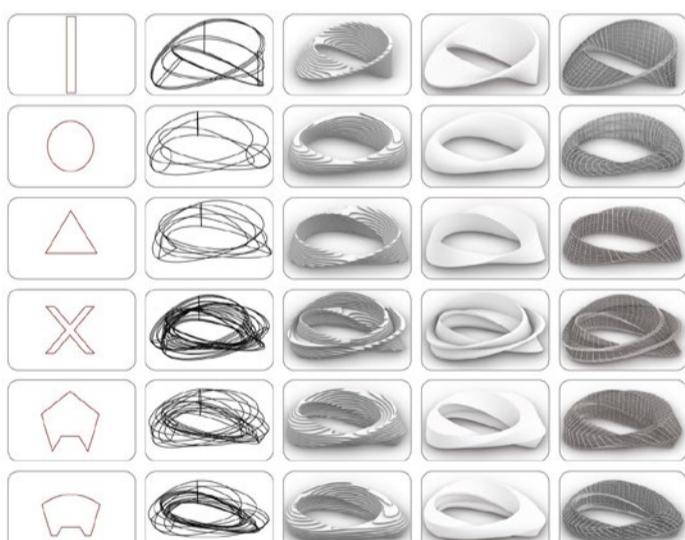
I explore how natural forms, such as the human ear's efficiency in capturing sound, can inform building geometries to optimise acoustic performance.



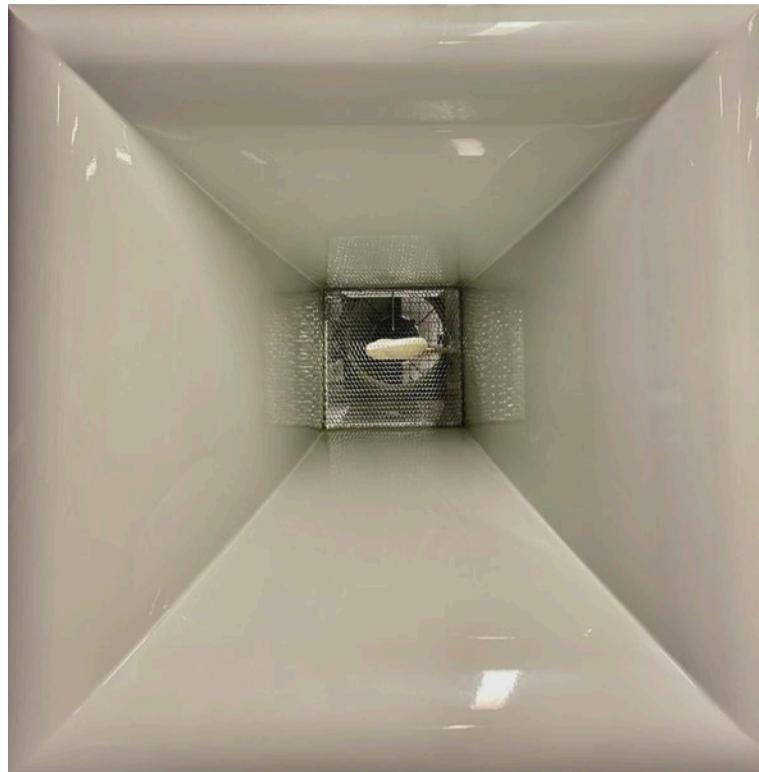
Iterative processes

Rhino and Grasshopper

At the scale of public projects, my process involves manipulating massing through data-driven transformations, balancing structural feasibility with spatial experience. By integrating voids and controlled porosity, shaping transitions that respond to environmental conditions foster new spatial narratives. This method allows for continuous evolution, ensuring design remains adaptive and performative rather than static.



FORM-FINDING



Physical modelling remains an essential aspect of my research methodology, bridging digital tools with tangible experimentation. Using computational techniques alongside 3D-printed prototypes, I conduct material studies and environmental simulations, including subsonic wind tunnel tests.

This intersection between digital and physical realms strengthens design validation, ensuring site-responsive and performative architectural outcomes.

Model Testing

3D Printing (PLA) Model inside Wind Tunnel

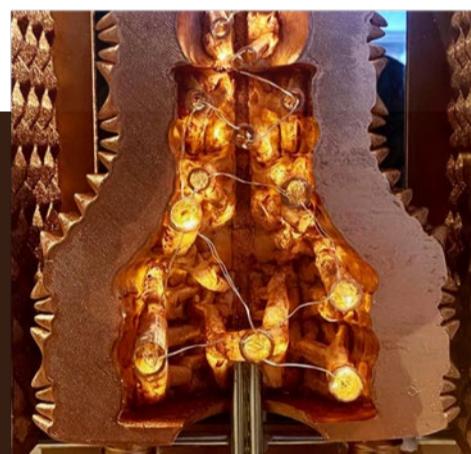
Organ(ic) Auscultation

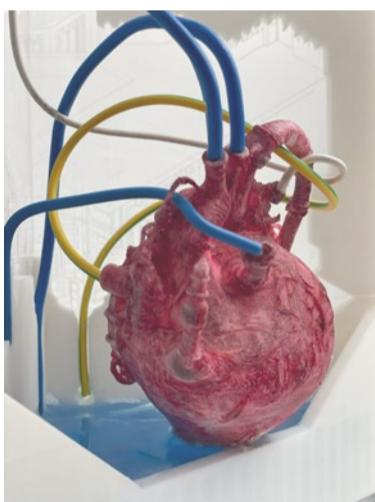
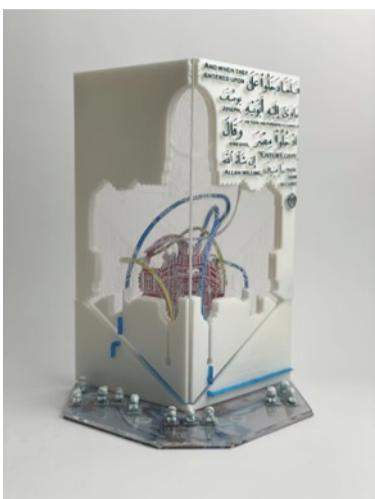
Rhino and Grasshopper Software, 3D Printing and Recycled Materials

This work explores the reliance on air, water, or solid matter mediums for sound to propagate and be perceived.

The textured ridges and grooves (alveoli) of the central form, your lungs, scatter and guide airflow, creating oscillating patterns known as vortex shedding.

When air, provided here by a humidifier, flows across its undulating surfaces, it can transform into soft vibrations and resonant tones. The central cavity amplifies this movement, much like our lungs guide breath into voice.





Data-driven modelling

3D Printing (PLA), Clay & Resin

This model exemplifies the process of understanding climatic and demographic data to move the subsequent project stages.

A building must be tailored to its location, which conveys, in this case, including the existing social ad cultural infrastructure, mosques, from the local communities' values and traditions.

This project, with a brief that asks for the proposal of a Cardiology Treatment Centre in Egypt, is now ready to be taken to the next steps.

The Gambia

Collaborating with the NGO Daughters of Africa in The Gambia involved leading community-based initiatives. The use of locally sourced materials while expressing the importance of it to the youth locals, with or without leadership aspirations, is something that I continue to express in the field of architecture.

COMMUNITY-LED



Orchestrating Architecture and Acoustics: Exploring Sound Dynamics in Performance Venues



RESEARCH PAPER

Creating a conceptual performance venue, perhaps flexible or adaptable, must follow practical guidelines and design solutions by applying tools associated with acoustics, natural lighting, thermal satisfaction, air quality and energy efficiency. This thesis will focus on integrating the auditory dimension into an architect's design process and emphasise absorbent materials to satisfy human perception. The method to tackle this has been to examine a prominent case study and influential theory that will justify the creation of an architecture that better resonates with users and prioritises human elements.

Coastal façade deterioration manifests through thermal shifts, structural fatigue and salt erosion, gradually revealed by human and environmental forces. Human intelligence is capable of decoding this matter through the use of accessible tools to inform interventions across the façade lifecycle and apply in future builds. Digital and remote strategies, such as Google Street View, Photoshop effects, hand-drawn segmentation and computational methods like Grasshopper enable scalable anticipations and remediation without on-site risks. This bridges human insight with machine learning, providing a robust method of mediating techniques that dismantle our curiosity. With this, we are able to record decay patterns to come up with new installations alongside training AI for first-stage empirical diagnosis.

[re]mediating diagnosis: A Study of Alexandria's Coastal Deteriorated Façades



RESEARCH PAPER



RESEARCH VIDEO



RESEARCH