

Selected work — 2024–2026

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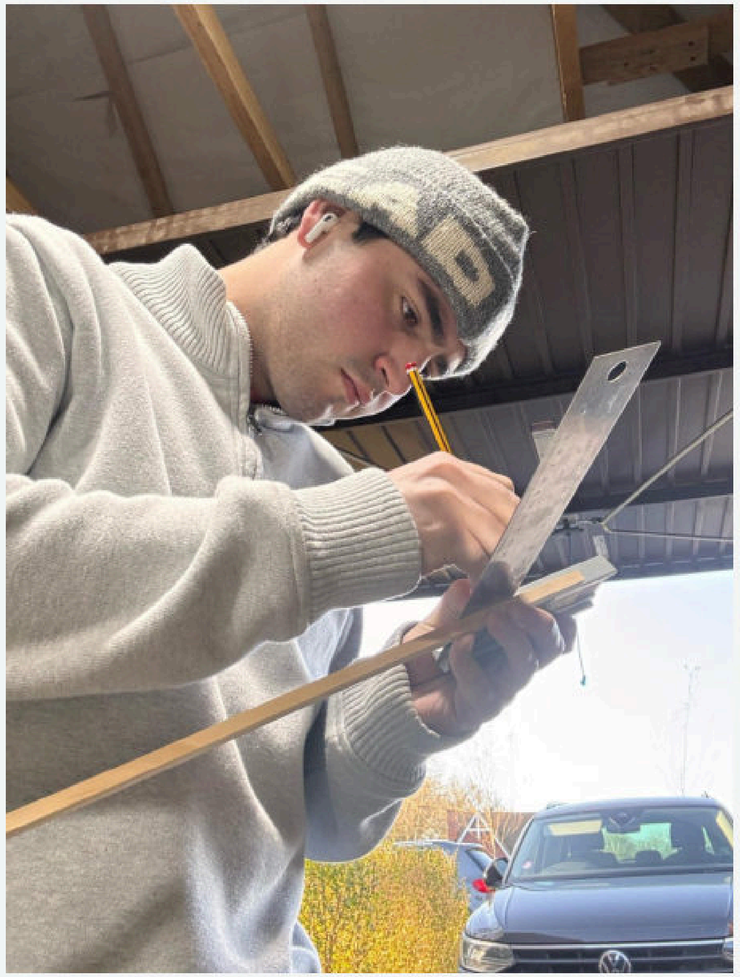
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About me



I design with longevity in mind — objects meant to last years, not be replaced within them. That interest in circular and socially critical design shows up in how I work: I'm strongest at physical prototyping, where an idea meets reality and either holds up or it doesn't. I'm building CAD fluency quickly alongside it, in Fusion 360 and SolidWorks, backed by sketching, technical drawing, and hands-on wood and metalwork.

What I want from a placement year is time in a studio long enough to watch decisions get made by people who've done this for years — not just at concept stage, but the harder calls around materials, manufacture, and what actually makes something last. I want to bring that back into my own work as a designer.

Education

BA Product & Industrial Design
University of the Arts London · 2025 - Present

Foundation Diploma, Art & Design
University of the Arts London · 2024 - 2025

Experience

Work Experience
Approach Studio: Industrial Design, London



Radia – Collapsible Firepit

Chosen for the 'UAL Millbank Exhibition' 2025

A collapsible, radial firepit that merges outdoor pursuits with modern comfort. Compact enough to fit in a rucksack, it offers multidirectional capabilities for shared warmth and atmosphere.

Duration
8 weeks, 2025

Context
University brief

Tools
Fusion360, Blender, metalworking

Outcome

'Radia' was my first experience working with metal. Learning how the medium works and reacts was very insightful.
I am very proud of how my concept, through lots of trial and error, did become a finalised, fully realised product.

Research & insight



Fig. 01 — Primary Research: Camping





Fig. 02 – Cooker Portable Stove, Yangsheng Xia



Fig. 03 - Elves Camping Accessories, Qing Yan

The brief was to design something for an activity of our choosing — I chose camping, an area I know well enough to design for honestly. In Fig. 01, I took myself and friends camping to observe both the obvious gaps and the smaller, easy-to-miss frictions that could be designed out.

I also had to be honest about scope: I couldn't credibly design for mountaineering or extreme conditions, so I focused on the type of camping I actually do.

01 **Lack of ergonomic and simple water filtration**

02 **Disposing and managing of fireplace waste**

03 **All portable fire-sources have the primary use of cooking instead of heating users.**

Sketch, model, refine

My initial ideas started with a compact, mobile water filtration device. That shifted toward a fireproof hammock for wild camping, and Radia emerged out of that direction.

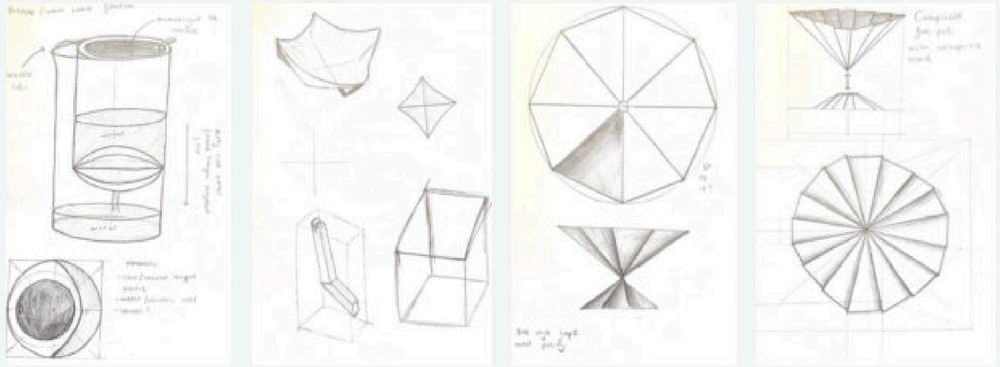


Fig. 05-08 — Ideation Sketches

I built scale models and renders in Fusion 360 and Blender, then used one component from that model as the template for the physical piece.



Fig. 13-16 — Making Process

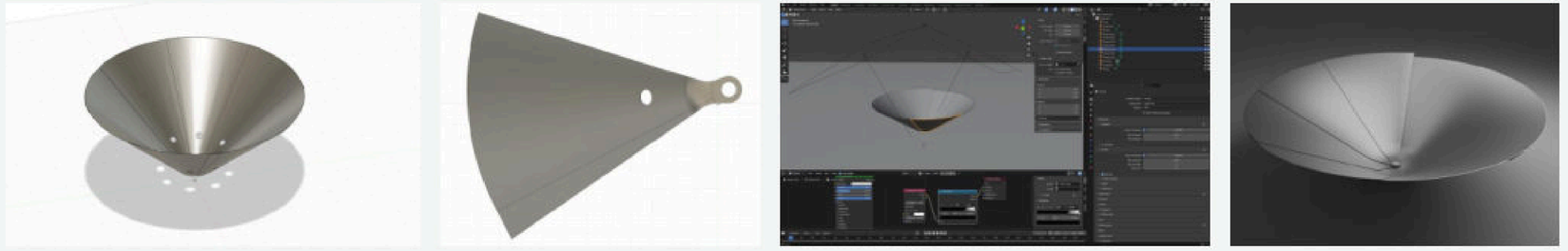


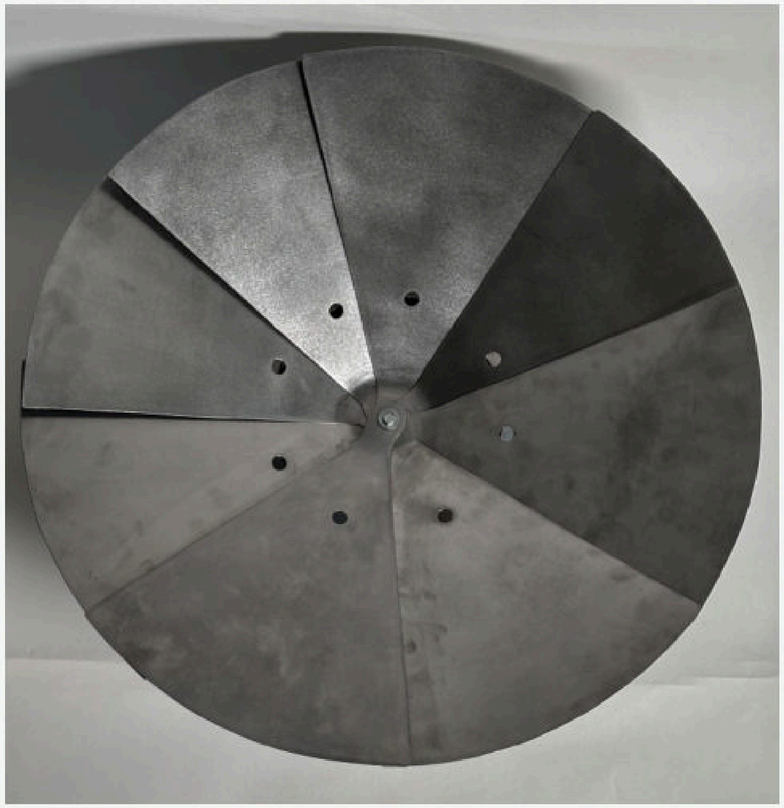
Fig. 09-12 — CAD

I had to adapt frequently whilst designing and making Radia.

It was my first time working with metal and therefore presented a lot of challenges, but all in all it changed my processes as a designer.

Final design







Radia – Collapsible Firepit

Made from Steel.

Hand cut, sanded, polished, and bent.



Glowing Lily, CO_2 Sensor

Tasked to design a screen-less, app-less digital device that gives the user a '*Seventh Sense*'

Duration
3 weeks, 2026

Context
'Seventh Sense' Brief

Tools
Fusion 360, Blender

Outcome
A fully modelled and researched product concept, including detailed component development.

Research

I started with statistical secondary research to confirm the effects of CO_2 in a closed environment. Pulling together research graphics from multiple sources, alongside independent reading, I distilled a simplified 400–2500ppm gauge to base the product around.

Key Findings: At 1,000+ ppm, humans experience 'mild hypercapnia': sluggishness, loss of focus, and headaches. Unventilated rooms reach this threshold within 1.5–2 hours of occupancy.

400 ppm	600–800 ppm	1000 ppm	1500+ ppm	2500 ppm
Fresh outdoor air	Average indoor space	Cognitive threshold	Unventilated study room	Severe hypercapnia
Safe	**Slightly elevated**	**Focus impaired**	**Brain fog onset**	**Dangerous**

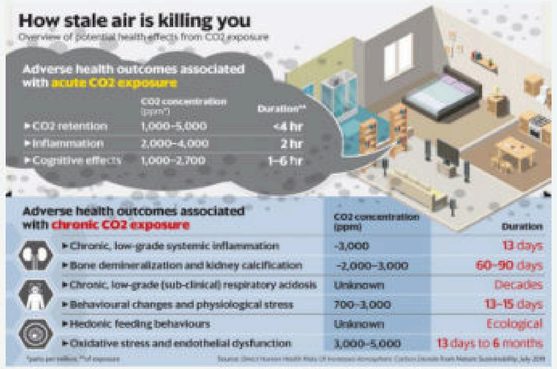


Fig. 01 — Affects of chronic CO_2 exposure, Mint

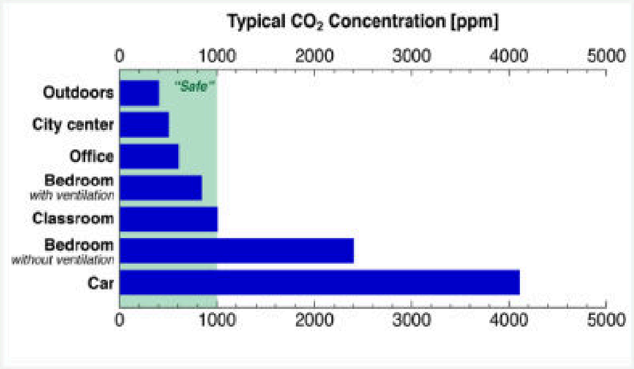


Fig. 02 — CO_2 Concentration Levels, Joel Jean - Medium

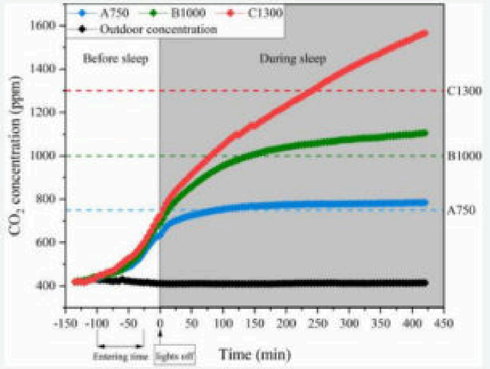


Fig. 03 - CO_2 Level comparison during sleep, Science Direct

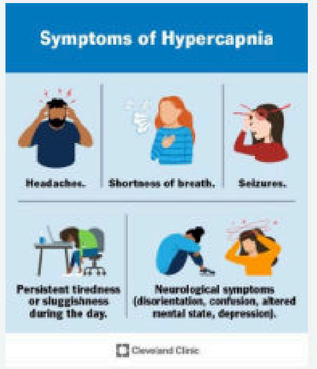


Fig. 04 - Symptoms of Hypercapnia, Cleveland Clinic

Concept and Process

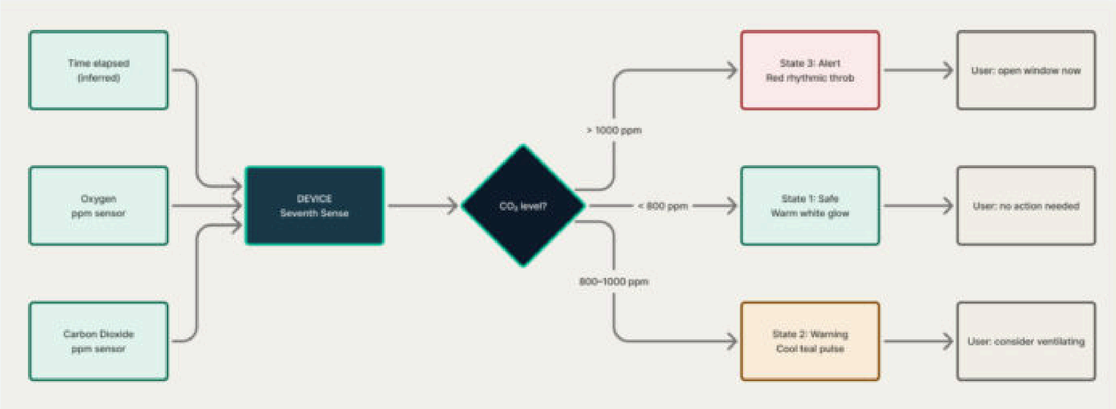


Fig. 05 — Inputs and Outputs Map

Sensor



Sensirion SCD40

Photoacoustic CO_2 sensor
10.1 × 10.1 × 6.5 mm
Trigger: 1000 ppm threshold

MCU



Seeeduino XIAO

Microcontroller
17.5 × 20.0 × 3.5 mm
Built-in USB-C power

Output



Adafruit NeoPixel Ring

12-LED RGB ring
OD 37 mm · ID 23 mm
3 mm thickness

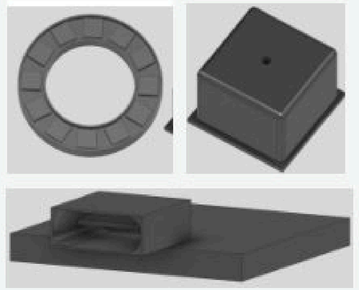
Power



USB-C (wall)

No internal battery
Wall-powered
Safe for desk use

Fig. 06 — Necessary components and measurements



Component layout

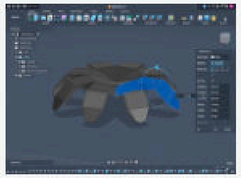


Component layout with designed housing



Components and housing inside product

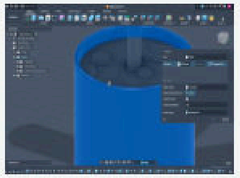
Fig. 07 — 1:1 Scale components and scale housing



CAD 01

Repeated Petal Design

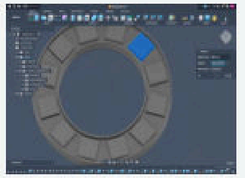
Complex shape that required a lot of fine tuning using the *'Filet'* and other tools.



CAD 02

Rounding edges and making bodies to appear less rigid

Taking time finding the best mm increments for specific faces



CAD 03

Mirror Tool usage for components

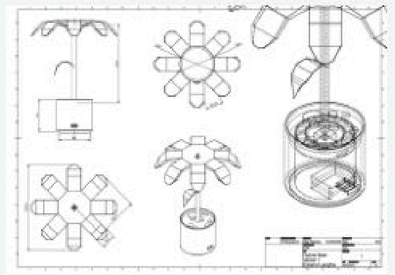
Discovering useful and specific tools to help display the real components scale

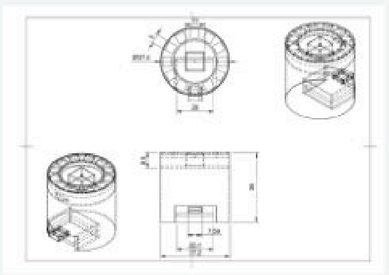
Fig. 08 — Showed usage of Fusion 360 to create 3D model

Final piece and Technical Package









Item No.	Part Name	Material / Process	Dimensions (mm)	Qty	Notes
1	Flower Head (petals + sepals)	PLA — 3D printed	~120 × 120 × 60	1	White/translucent PLA for natural look
2	Stigma / pollen tube assembly	Translucent PLA — 3D printed	~15 × 15 × 30	1	Houses NeoPixel ring behind diffuser tip
3	Stem (flexible)	TPU — 3D printed	Ø12 ×119	1	TPU allows positionable flex as per sketch
4	Base / pot housing	PLA — 3D printed	Ø 59.8 × 45	1	Holds all electronics internally
5	Base lid / underplate	PLA — 3D printed	Ø 59.8 × 5	1	Snap-fit or screw close for access
6	Sensirion SCD40 CO_2 Sensor	PCB component	10.1 × 10.1 × 6.5	1	Mounts inside base with vent hole in pot wall
7	Seeeduino XIAO (SAMD21)	PCB component	23.5 × 17.5 × 3.5	1	Microcontroller — USB-C powered
8	Adafruit NeoPixel Ring (12 LED)	PCB component	Ø 37 (OD) × 3	1	Seated inside stigma assembly
9	USB-C Cable + Wall Adapter	Off the shelf	—	1	Power supply — no internal battery
10	M2 × 6mm Self-tapping Screws	Steel — off the shelf	Ø 2 × 6	4	For securing PCB components inside base
11	Stem-to-base connector	PLA — 3D printed	Ø 12 × 15	1	Rigid collar to locate TPU stem into base
12	Stem-to-flower connector	PLA — 3D printed	Ø 12 × 15	1	Rigid collar at top to hold flower head



Living Habitat

Security. Sustainability. Seamless.

A project based in rewilding, the ‘Living Habitat’ acts as a birdhouse for multiple birds whilst incorporating the foundations for a living roof.

Duration
3 weeks, 2025

Context
University Brief

Tools
Woodworking machinery, Procreate

Outcome
A fully functional birdhouse. My first project using woodworking, especially in an established workshop.

Research and Conceptualizing

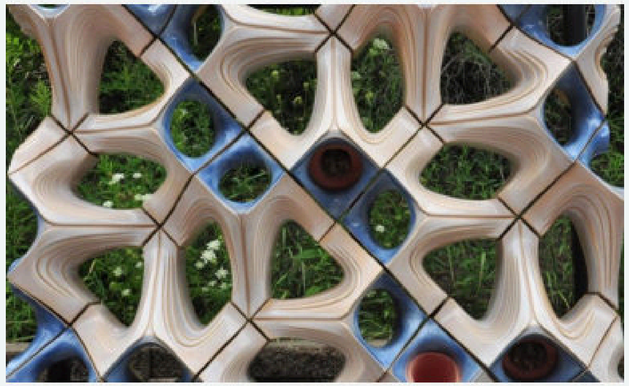


Fig. 01 — Buro Happold & Cookfox Architecture: Living Facade



Fig. 02 — ACROS Fukuoka Building, Japan, Emilio Ambasz



Fig. 03 — Numbird, Nicer Design



Fig. 04 — Traditional Icelandic house

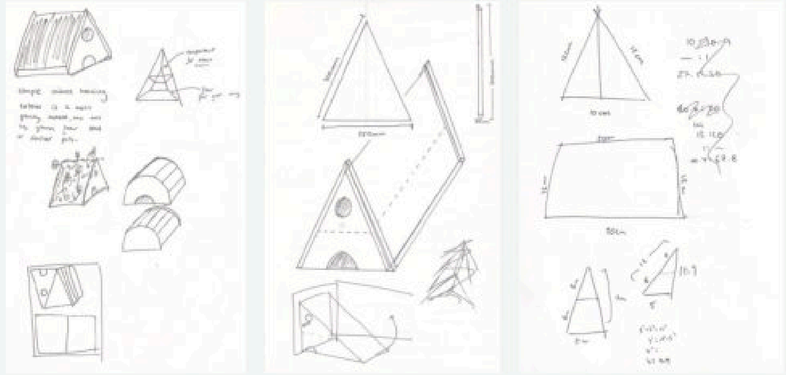


Fig. 05-07 — Original sketches and mathematics for Living Habitat

Designs that combine practicality and sustainability are what genuinely interest me. I researched both product and architectural precedents to find a way to merge the two into something useful and viable.

As my first project working with wood in an established workshop, I wanted something precise enough to properly test whether I could follow through on a technical build.

01 **Material:** Wood I had access to: Pine, MDF, Birch, Oak.

02 **Purpose:** To house/ shelter multiple organisms in one product.

03 **Design Style:** Direct inspiration from Nordic angular houses

Prototyping and Process

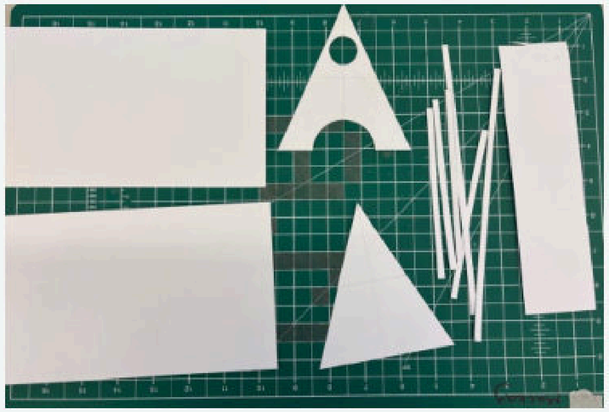


Fig 08 – Paper template I would use for every model iteration



Fig 09 – First scaled down model, paper





Fig 10-11 – Cardboard scale model, discovering issues in design





Fig 12-13 – Wooden prototype model. Discovering machinery and processes

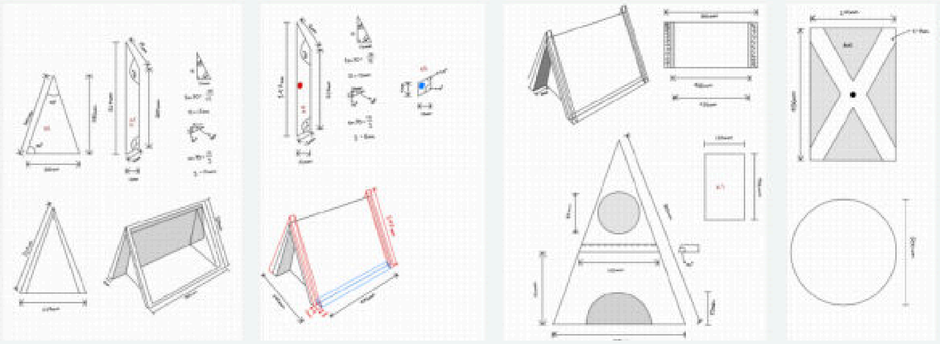


Fig 14-17 – Hand-drawn technical drawings. Before I was used to CAD.

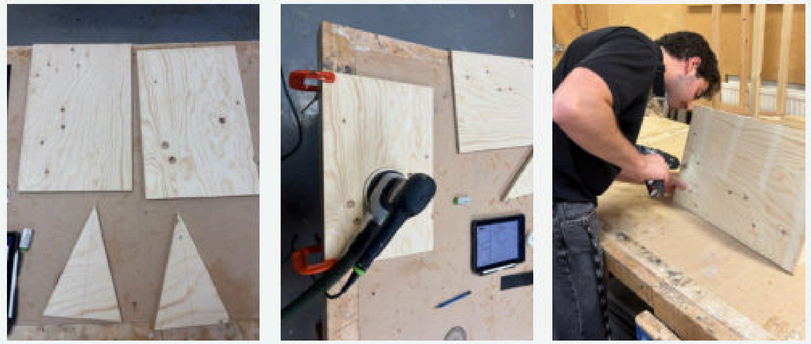
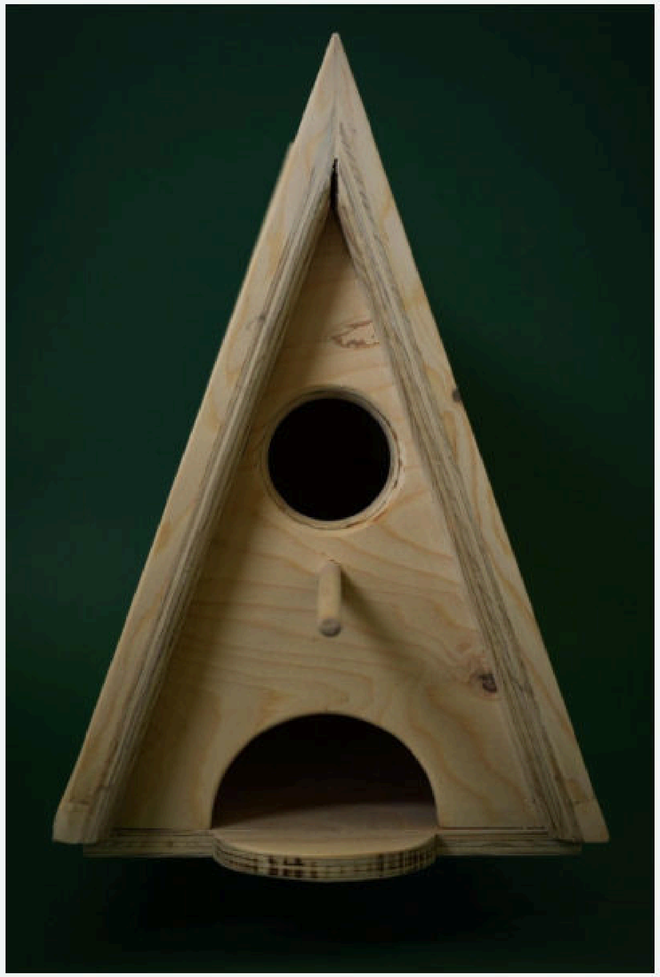


Fig 18-20 – Me making the 'Living Habitat'. Love for woodwork started here

Final Product









Turkish Spice Pot Concept

First project I ever tackled in my Product Design journey was ‘Vessel’. We were each randomly assigned a word, I was given “Peppercorn”.

I did historical, modern, and chemical research into the peppercorn to try and find a pathway that resonated with me. This looped back into my Turkish heritage where the rest of the project flowed from.

Duration

2 weeks, 2024

Context

University Brief

Tools

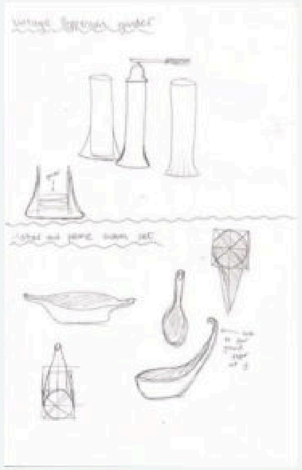
No digital tools, entirely analogue project

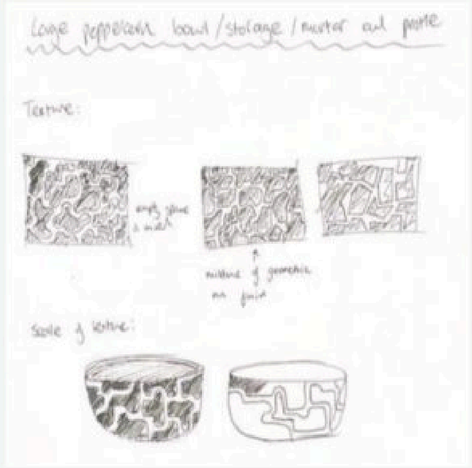
Outcome

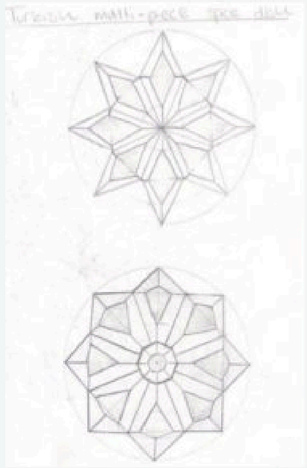
A multipiece spice dish designed after traditional ceramics whilst taking inspiration from geometric shapes.

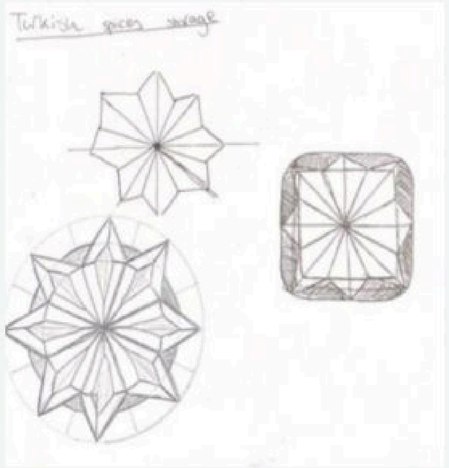
Ideation and Process

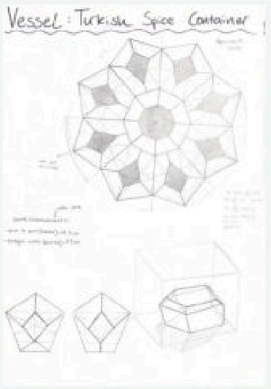


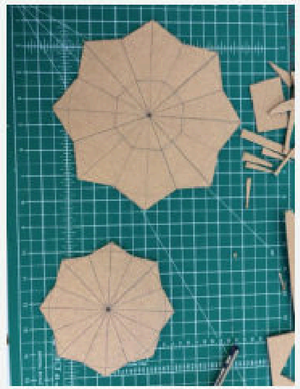




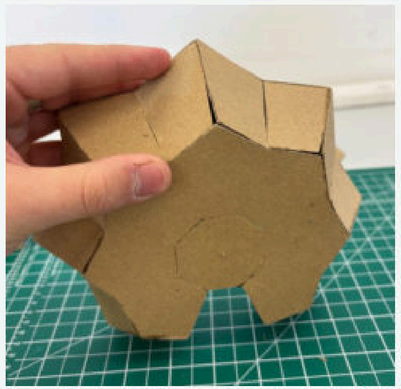


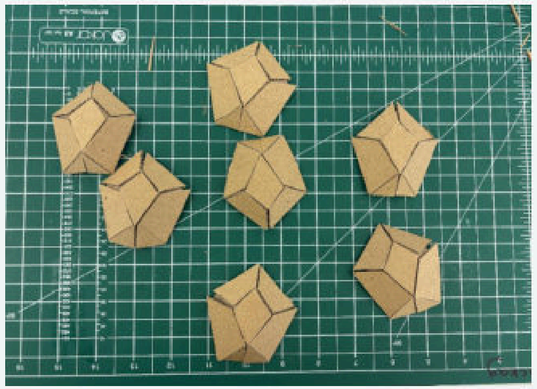












My initial ideas started extremely conceptually, with strange forms and less than efficient uses.

Just by experimenting through shapes, I started following geometric shapes as that resounded with myself much better

Final Concept Model Result

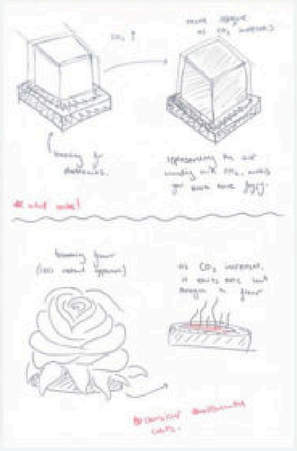


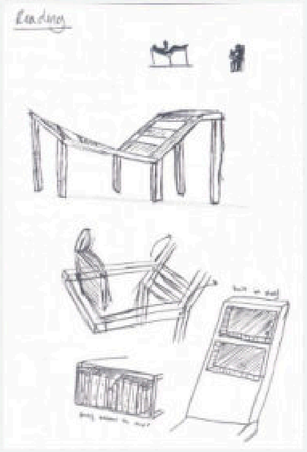


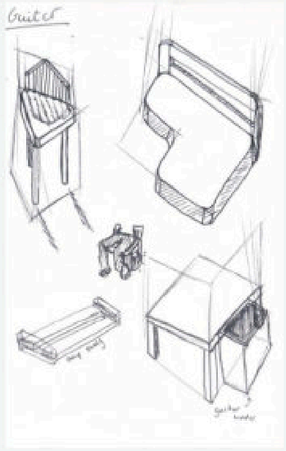


Sketchbook, Workshop, and Various Collections

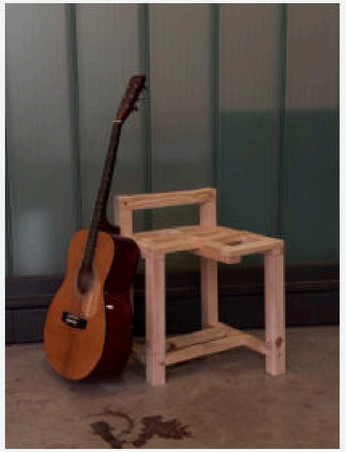


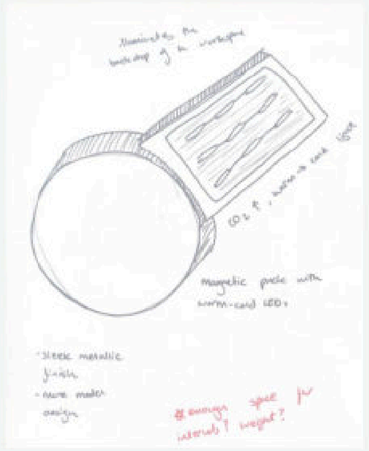


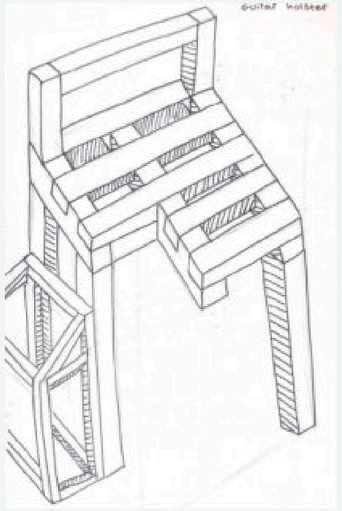


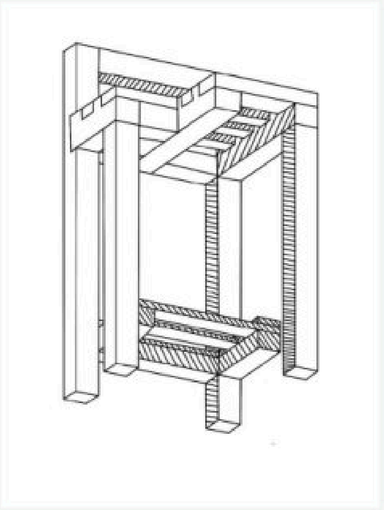


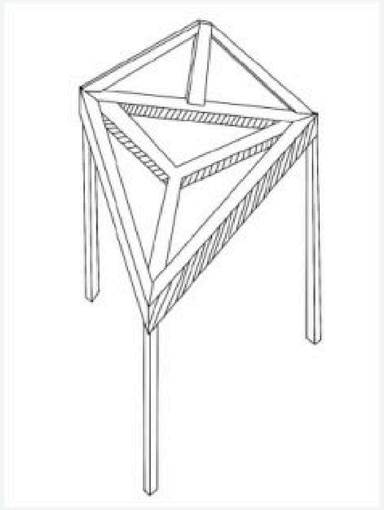


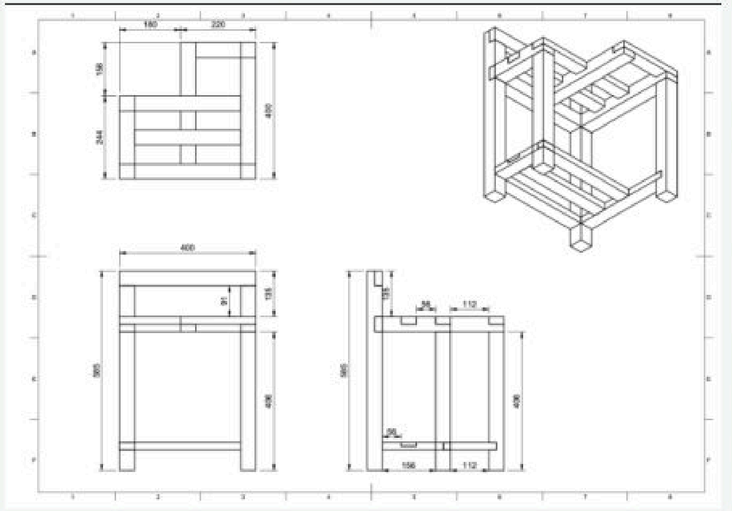


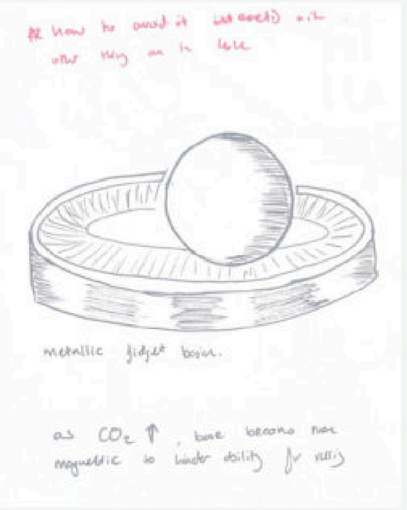












I welcome the opportunity to talk to you about our future working together

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Portfolio

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