

2024

PORTFOLIO

MIGUEL PASCUAL

INDUSTRIAL
DESIGN





About Me and My Work

Design is my way of **improving lives**. As an Industrial Design Engineering student, I strive to create objects and products that are not only **functional** but also **meaningful**. My passion for 3D printing allows me to transform **innovative** concepts into tangible realities, merging **creativity** with **precision**.

Inspired by **minimalist principles**, I focus on **simplicity, functionality, and human centered solutions**. Every project I undertake aims to **enhance user experiences**, bringing **purpose** and **elegance** to everyday objects.

My ultimate goal is to **design with impact** **exploring technology** and **materials** to **push boundaries** and **make a difference**.

"Designing with simplicity, for a better world."



HELLO! I'M MIGUEL.

I am currently pursuing a Bachelor's degree in Industrial Design Engineering at the Polytechnic University of Madrid, where I have developed a strong foundation in design principles, technology, and user-focused innovation. This program has allowed me to combine technical knowledge with creativity, shaping my approach to problemsolving and product development.

After completing my degree, my professional goal is to create and refine industrial designs that not only fulfill functional requirements but also improve the daily lives of people. I aspire to design solutions that address real-world challenges, delivering products that are meaningful, sustainable, and impactful for their users.

By integrating advanced tools like 3D printing and exploring emerging technologies, I aim to push boundaries and leave a lasting positive mark on the communities I design for.

✉ Migueldesignhub@gmail.com
📷 migueldesignhub
🌐 migueldesignhub.es



Education.

Polytechnic University, Madrid

BSc in Industrial Design Engineering and
Product Development
2021-2025

Thomas Worthington High School, Ohio

Exchange student program
2018-2019

Experience.

Miguel Design Hub 2023- Act.

Freelance
Design, develop, and bring concepts to life through
detailed modeling and 3D printing.

Language.

Spanish | Native

English | Advanced (B2)

Achievements.

TED TALK

Maristas Segovia High School
Selected for creating and presenting a TED talk based
on my academic merits.

Courses.

Advanced Industrial Design with SOLIDWORKS - 450H

FormaCad
2023-2024

SOLIDWORKS CAD Design Associate (CSWA)

Dassault Systems
2024

Additive Manufacturing (CSWA-Additive Manufacturing)

Dassault Systems
2024

3D printing technology and its application in professional health activities

Institute of Biomechanics (IBV)
2024

Skill.

Hard Skills

3D Printing
3D Modeling
2D/3D Rendering
Design Research
Prototyping

Soft Skills

Responsibility
Organization
Leadership
Teamwork
Attention to detail

Software

Graphic Design
-Photoshop
-Illustrator
-Premiere Pro

Modeling /Rendering
-Rhino
-Solidworks
-Blender
-Keyshot
-Fusion 360

3D Printing
-Orcaslicer



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-Team Project / 4 months

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Rotating Accessible Storage System

-Team Project / 4 months

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MiguelDesignHub

Miguel Design Hub: 3D Printed Innovations
and Freelance Services

-Personal Project

White Out

Emergency Avalanche Locator System

White Out is a cutting-edge device designed to enhance survival chances during avalanches. Automatically triggered when it detects you being dragged by snow, the system launches itself from your backpack, reaching the highest possible altitude. It deploys a parachute to stabilize its descent while releasing a brightly colored dye, marking the snow to ensure rescuers can locate you quickly and effectively. Combining innovative technology with practical design, this system is a vital tool for those venturing into snowy terrains.

Colaborators
Marta Segura Cubells
Ane Román Aurrekoetxea
Jorge Martín-Luengo
Nuria Torrubiano

Project Type
Group of 5

Awards

James Dyson Awards 2023 contestant

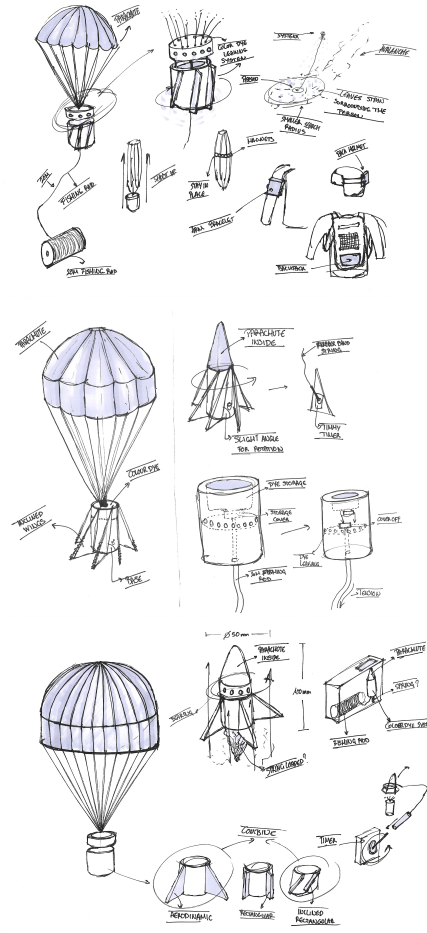
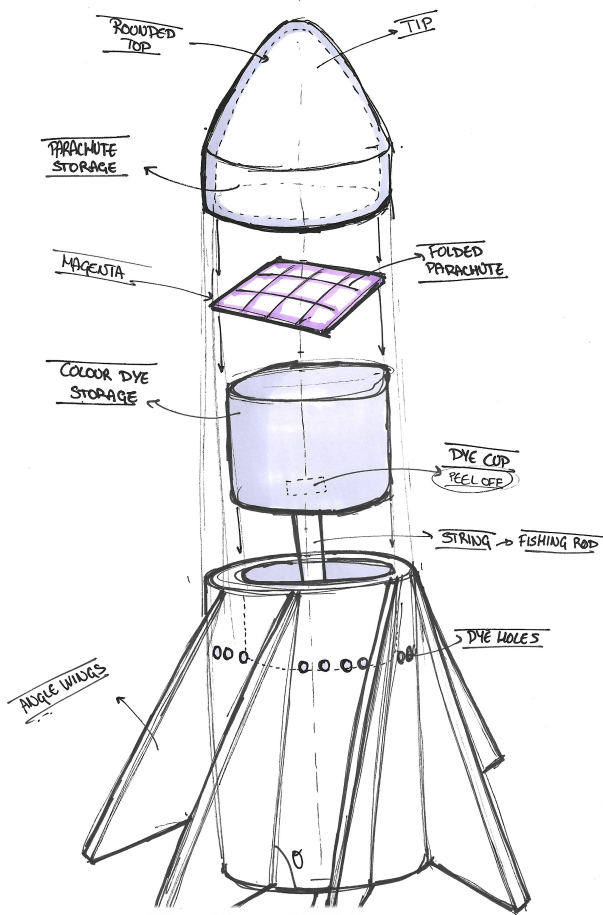
Contribute
Concept Design
Design and Modeling
Material and Scene Rendering
Video Edition



Development Process

Concept Sketches

The initial design phase began with detailed sketches exploring the device's form and functionality. These concepts prioritized portability, aerodynamic performance, and effective deployment in critical conditions.



Logo and Branding

The logo was designed to reflect the core principles of the device: safety, visibility, and innovation. Its clean, modern lines convey a sense of trust and purpose, essential for a life-saving product.



Final Design and Features

Renders and Key Features

The final design integrates an aerodynamic shape for efficient deployment and a high-visibility dye release system. The device is compact, easy to carry, and ensures rapid localization in emergency situations.

Video Snapshot

A video was developed to demonstrate the deployment process in action, showcasing the device's ability to improve survival rates in avalanches by ensuring rapid visibility and rescue.



Lööpa

Rotating Accesible Storage System

Lööpa is an innovative kitchen cabinet designed to improve accessibility for individuals with reduced mobility. Featuring an internal mechanism inspired by paternoster elevators, its drawers rotate smoothly when activated, bringing stored items to a reachable height. This system ensures that every object, even in tall cabinets, is easily accessible, combining functionality with thoughtful design to create a more inclusive kitchen experience.

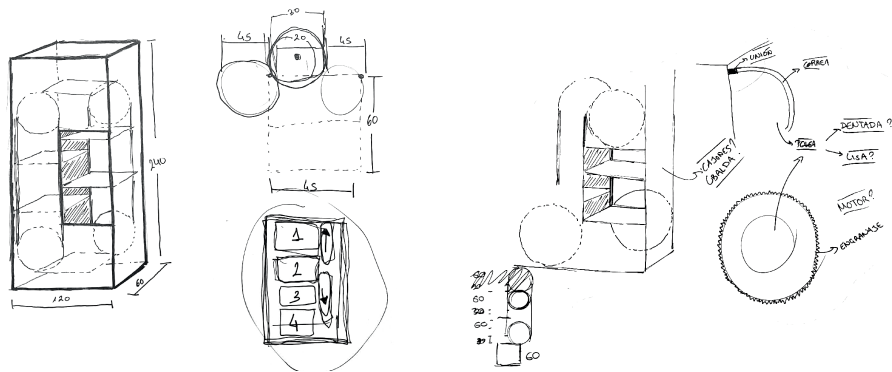
Colaborators	Rodrigo Narciso Torreño José Sánchez Diego Alejandro Momblán Medina
Project Type	Group of 4
Contribute	Concept Design Design and Modeling Material and Scene Rendering



Development Process

Concept Sketches

The initial sketches explored the concept of a rotating cabinet mechanism inspired by paternoster elevators. These ideas aimed to provide an innovative solution for improved accessibility in kitchen storage.



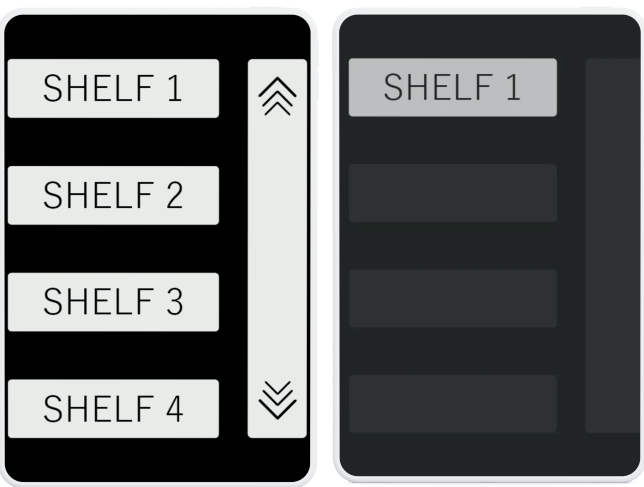
AI-Assisted Ideation

Artificial Intelligence was integrated into the ideation phase to explore innovative concepts and forms for the rotating storage system. By generating diverse design possibilities, AI tools accelerated the creative process and contributed to shaping the final vision of the product.



System Interface Design

A user-friendly interface was designed to ensure intuitive operation of the rotating cabinet system. The screen displays accessible controls, enabling individuals with reduced mobility to reach stored items effortlessly.



Logo

LÖÖPA

Final Design and Features

Render Highlights

The final design features a rotating mechanism that allows users to access all stored items, regardless of cabinet height. Inspired by paternoster elevators, the system ensures seamless functionality, combining innovation with accessibility.



Context of Use

Designed with inclusivity in mind, the system fits seamlessly into modern kitchens, providing a practical solution for individuals with reduced mobility.





Miguel Design Hub

Miguel Design Hub: 3D Printed Innovations and Freelance Services

Miguel Design Hub is a personal brand dedicated to creating innovative 3D-printed products and offering professional design services. Combining creativity with cutting-edge technology, it serves as a platform to bring unique ideas to life while providing tailored solutions for clients. Focused on quality, precision, and functionality, Miguel Design Hub embodies a commitment to impactful and accessible design.

Project Type	Personal Project
Contribute	Concept Design Design and Modeling Material and Scene Rendering



Customizable Lithophane Lamps

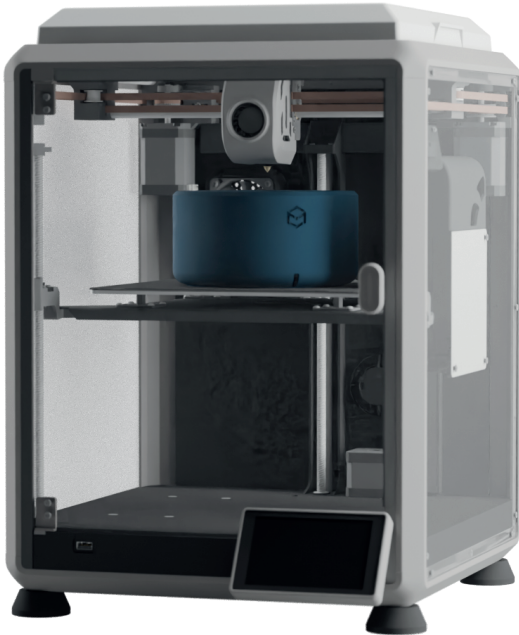
Description and Features

Transform personal memories into functional art with our customizable lithophane lamps. By harnessing the power of 3D printing and lithophane technology, these lamps reveal intricate photo details when illuminated, blending sentimentality with modern design.

Choose any photo—family moments, pets, or cartoon—to create a unique and meaningful lamp.



Crafted using precision 3D printing, ensuring durability and exceptional detail.



Visuals

Each lamp tells a story, transforming ordinary photos into captivating designs. Here are some examples of how our lithophane lamps bring cherished memories to life with light and detail.

Before (off)



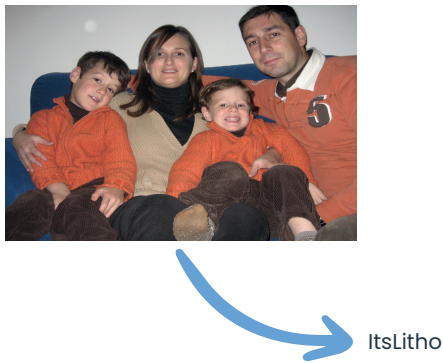
After (on)



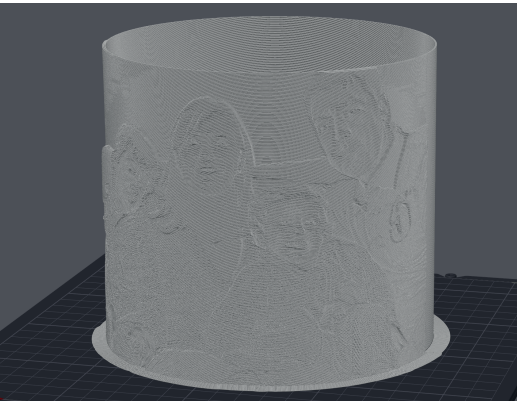
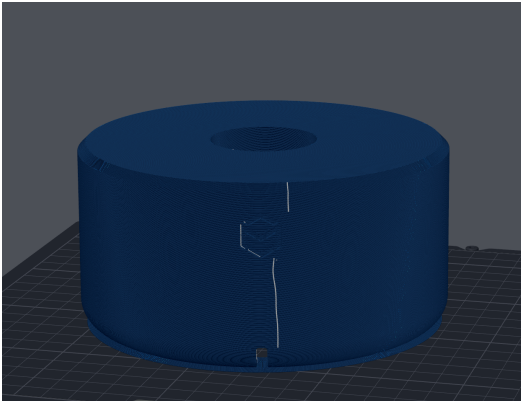
How It's Made and Customized

Creation Process

Each lamp is carefully crafted through a multi-step process, combining cutting-edge 3D printing technology and lithophane design techniques. Here's a glimpse into how your personal memories are transformed into a beautifully illuminated artwork.



Our lamps are made using high-quality materials that ensure durability and color accuracy. The 3D printing process allows for the fine details of your chosen image to be captured perfectly, ensuring a glowing silhouette when lit.



Orcaslicer

Customization Options

Personalization is at the heart of our design. You can choose from a variety of styles, colors, and photo options to create a lamp that fits perfectly with your space and preferences.



Miguel Design Hub Online

Logo and Brand Identity

Miguel Design Hub represents the fusion of creativity, technology, and functionality. The logo reflects our commitment to creating personalized, innovative designs with a modern, clean aesthetic.

Principal



Secondary



Website and Social Media Presence

Visit our website to discover more about our customizable 3D-printed products and stay updated with our latest creations.

We also invite you to connect with us on Instagram for a closer look at our design process, new product launches, and customer stories.



Join the Miguel Design Hub community—where creativity meets functionality. Visit our website, follow us on Instagram, and be part of our design journey.

SHOP NOW

FOLLOW

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CONTACT

✉ Migueldesignhub@gmail.com

📷 [migueldesignhub](https://www.instagram.com/migueldesignhub)

🌐 migueldesignhub.es



Instagram



Website

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