Portfolio.

Luis Jurado

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Industrial Design Engineer

With sport, I have got a strong mindset that helps me a lot by never giving up until I achieve my goals. Also, I am a very open person that loves to meet new people and be searching something to learn from each person that I know.

Life and work

To me, the key of being happy and comfortable in life is passion. Passion is all you need to become the person you want to be. I feel that is my personal path I have to follow and that means I have to be the same whenever I am working. I find pleasing to give always a personal perspective in the proyects I get. I think life is surrounded of solutions for everything but sometimes you just need to stop for a second and analyze each moment that passes through your eyes. I am an observer of life.

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Ifach

Organic shaped hangboard for experienced climbers

IFACH

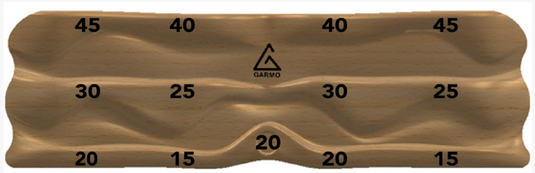
Ifach

Ifach is a revolutionary hangboard in the climbing world. The organic design, the innovation in the holds and the unique and original extra functionality for training slopes make this product one of the most complete designs in the hangboard market.

Holds

The holds of the hangboard are the most important part of the design. The distribution of the holds is not arbitrary. The length of the holds for the finger vary from 45mm to 15 mm. Furthermore, the length of the holds are distributed by rows in the hangboard. The highest row has the biggest holds while the lowest has the smallest ones.

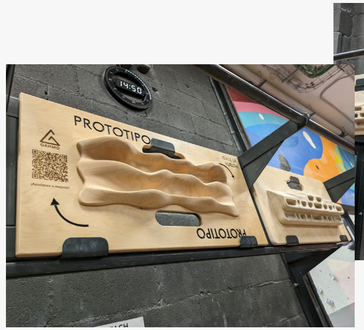
The innovation in the design comes from the slope training. This is another type of holds that usually does not come in a common hangboard. In this case, all that the user needs to do is to flip the hangboard over and a new hangboard will appear with slopes of different level of difficulty.



Prototype

The first prototype of the hangboard was used for one month in one of the biggest climbing gyms in Spain: Sputnik Climbing Las Rozas.

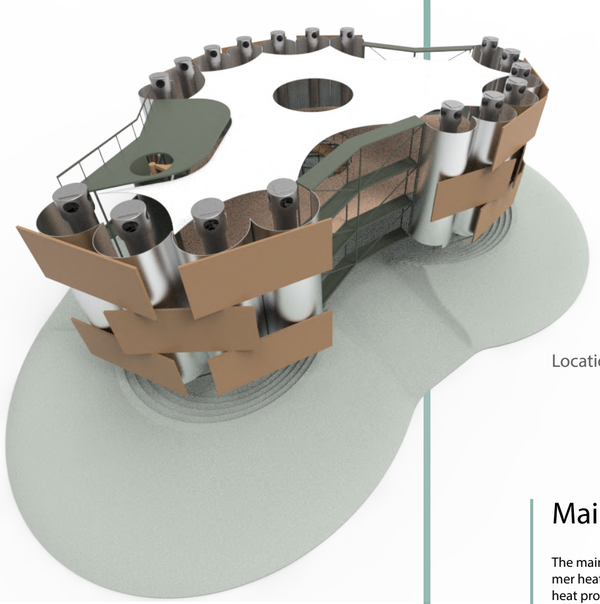
Having this first prototype used in one of the most popular climbing gyms in Spain helped a lot in improving the design in many different aspects. The prototype had a QR code where the climbers could participate in a survey to describe all the necessary improvements to be made for the next prototype.



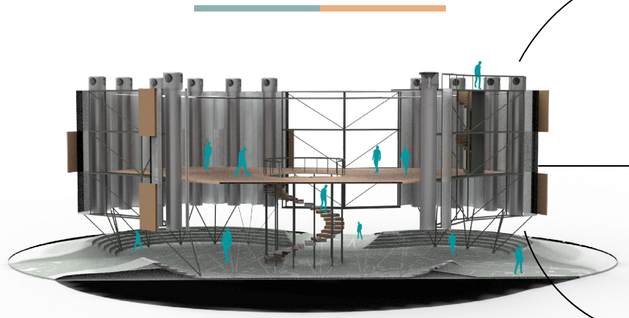
SputnikClimbing

Céfiro

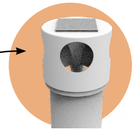
Reducing the urban-heat-island effect in Lavapiés



Location: Plaza Agustín Lara, Lavapiés

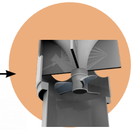


Tower of air



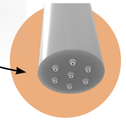
Opening

It is the main orifice where the air can pass through. In the top there is a solar panel in order to give power to the fan.



Fan

The fan creates air flows through the tower.



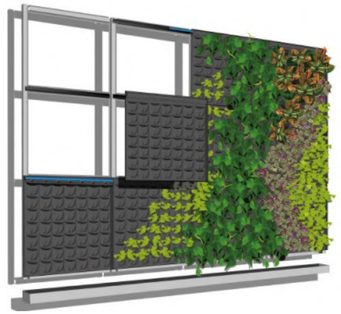
Nozzles

The nozzles point and gives direction to the different air flows.

Walled garden

The perimeter of the srtucture is full of panels with walled gardens. This gardens have the capacity of growing in vertical surfaces. The are equipped with a drip irrigation system that allows the plants to live and grow.

The walled gardens contribute to reduce the temperature of the inside of the structure.

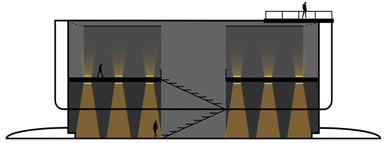


Main goal

The main goal of Céfiro is to reduce the summer heat that concentrates in the cities. This heat produces stress, illness and discomfort to the citizens.

Temperature

Céfiro reduces from 4 to 10 ºC the temperature of the inside by using 17 wind towers that force the wind to cool and pass through the structure.



Enlightenment

The structure has 3 floors in total. Each floor has a different illumination depending in the type of activity that is having. Céfiro also lights up in the night.

El Matiz

Indoor climbing replica of one of the most iconic boulders in La Pedriza

Main goal

The main goal is reproducing a rock climbing boulder located on La Pedriza and adapt it to indoor climbing. Climbers will have the same physical experience as if they were climbing it in its original site, only changing the enviroment.

Photogrammetry

By using up to 350 photos of the rock and the help of agisoft Metashape, I have been able to create a 3D model of the complete boulder.

Once the 3D model is done, the holds have to be taken to be redesigned.

Holds

The holds of the boulder have to be design in order to have the same experience as if you were climbing other indoor climbing boulder. This will be possible by 3D printing all the holds with a specific polymer.

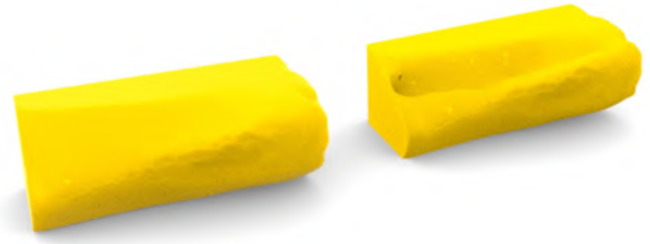
Grades

El Matiz has to be a climb for eveyone. Nobody can be excluded form climbing this iconic boulder. By creating two different grades of holds, this boulder will have opportunitties for most climbers. As you can see, the different holds change its shape .

Easy

Difficult

The difucIt grade is practically the same grade as the original boulder. Only changes conditions and the material of the holds.



Cooker 360

Designing for Malagasy people

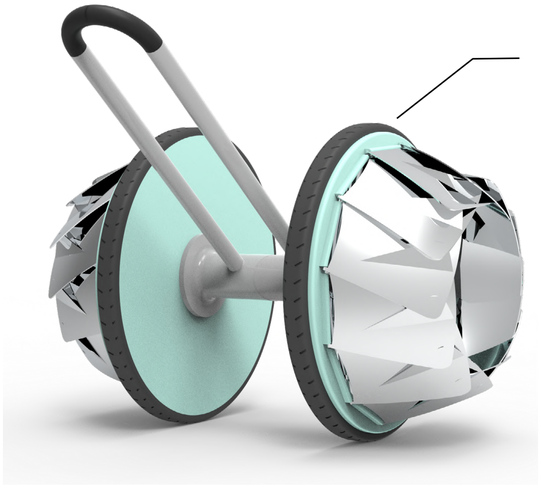
Madagascar

Madagascar is ranked in the list of countries that most suffer from famine. 43,20% of the population suffer from hunger and 75% of the country is poor. They can not afford to have electricity, electhrodomestics or cookers.

Design and Sustainabilty

Cooker 360 is a design that allows to carry 2 solar cookers in a simply and compact way.The two cookers are connected by a handlebar that helps to transport the product wherever is needed.

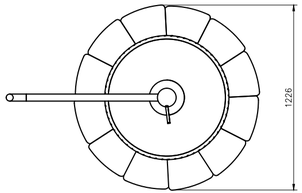
It is a design that helps connect communities by sharing the product among all the tribes that need of a way to cook.
It is made from recycled materials participating in the circular economy and cooperating with the Sustainable Development Goals.

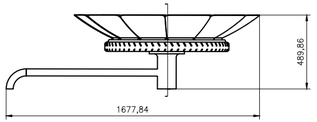


Rubber

The wheels are covered with reused rubber. The rubber is a material that can not be recycled. Cookwheels makes the most of this material until it gets useless.

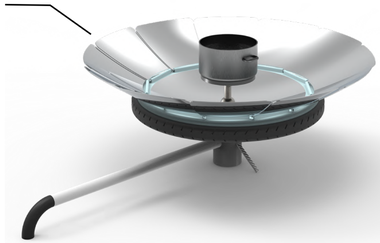
Dimensions





Fins

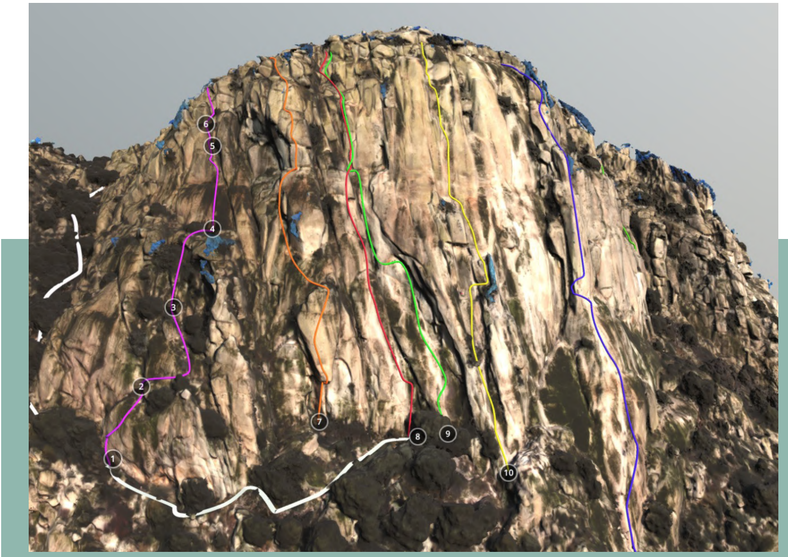
Aluminium fins reflect the 90% of sun energy and power that receives. In order to use the cooker you have to open the fins by pulling out. They willopen like a flower.



3D Climb

Virtual 3D model of a mountain as a climbing guide

3D Climb

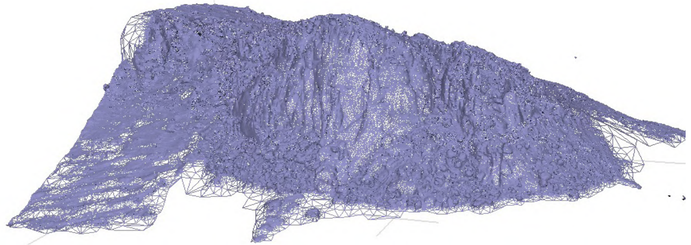


3D climb consists of the revolutionary idea of creating a phone application where climbers can study the route they are going to make in a 3D model instead of a 2D photograph where you can check any detail of the terrain or the important specifications of the climb.

Process

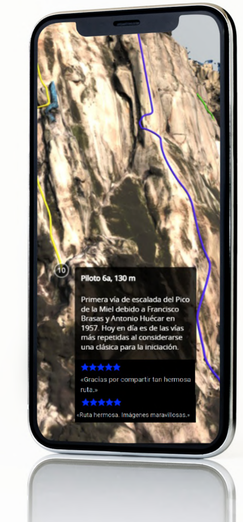
The digitalization of Pico de la Miel, a process that involves capturing detailed images of this mountainous formation, will be carried out using a DJI Mini 2 drone due to its large dimensions, making it impractical to use a conventional camera from the ground. The use of a drone allows for precise and complete aerial shots, which are necessary to capture all facets and details of the mountain.

The DJI Mini 2 is particularly useful in this context due to its ability to fly in challenging environments and its image stabilization system, which ensures sharp and well-focused photographs even in windy conditions. This drone model offers a 12 MP resolution for photos and can record video in 4K, providing excellent quality for landscape digitalization.



Phone app

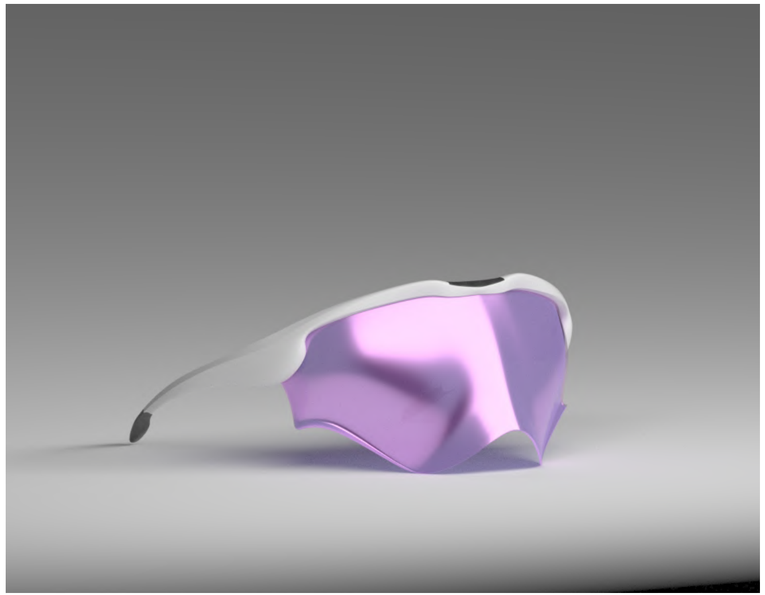
The idea is to create an interactive virtual climbing guide where a user can check the characteristics and route of their next climb simply by creating an account. After completing the climb, the user can also rate the route, give advice, and post comments about their experience. This will also make it easier to update the status of the routes, such as risks of rockfall, broken holds, moisture, or the level of wear, thereby creating a more connected and symbiotic communi-



RASP X

Custom fit glacier sunglasses for 3D printing.

RASP X



Custom-Fit Glacier Glasses for maximum protection and style in extreme conditions.

Rasp X, showcases innovative features, including a fully integrated nose cover and side shields, custom-fit lens, and a sportive design.

This sunglasses are possible by leveraging advanced 3D modeling tools such as SubD-NURBS modeling.

Alpinism

Alpinism is a sport where the conditions are extreme. The main skin cancers come from UV exposure of the sun. In the sport of alpinism the parts of the body that suffer most from UV exposure are the cheeks and the nose. proper sunglasses for the sport must cover these.

3D Printing

By bridging the gap between functionality and aesthetics, this design establishes a foundation for future innovations in sports eyewear and underscores the potential of 3D printing in industrial design.

Custom Fit

The sunglasses are made by 3D scanning the head of the user and modeling the sunglasses in Rhino 3D around the scanned face. With this method, the final product is a perfect custom fit design personalized to the customer.

Luis Jurado

Curriculum Vitae

Contact

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Profile

Hardworking person who is committed to use his skills and knowledge in order to collaborate in the mission of a company. Looking forward to learn and work hard.

Skills

Software that I work with:
Rhino, Inventor, Siemens NX, Fusion 360, SolidWorks, AutoCad, Adobe Photoshop, Adobe InDesign, Rhino, Adobe Illustrator, Microsoft Office, Keyshot, Granta Edupack, Sketchup, Agisoft Metashape, OpenSim, S.A.M, Kinovea.

Languages

- Spanish: native language
- English: C1 certificate
- French: basic level
- Dutch: A2 certificate

Leadership

Founder and president of G.E.M.
G.E.M (Grupo ETSIDI Montaña) is a student organization that creates outdoors activities in the mountain for university students.

Employment history

Visual Designer, Rotor Bike Components, Ajalvir, Madrid
March 2023-June 2024

Internship in one of the main companies in the Bike Components Industry in Spain.

Sports advisor, Decathlon, Enschede, Netherlands.
October 2024-February 2025

Part time job in one of the biggest sports store in the world. I worked in the bikes section giving advice to customers and also assembling bikes.

Education

Bachelor in Industrial Design Engineering. Universidad Politécnica de Madrid.
SEPTEMBER 2019-MAY 2023

Master in Industrial Design Engineering . Universidad Politécnica de Madrid.
SEPTEMBER 2023-JANUARY 2025

Master's Thesis in Industrial Design Engineering . University of Twente.
FEBRUARY 2024-JANUARY 2025