

ALBUM B-SIDE — SOLOWORK

1-"BEEHIVE"

A FUTURE LIFESTYLE

2-"POSEIDON PLAN"

DOMESTIC HUMIDITY CONTROL

ALBUM A-SIDE — TEAMWORK

3-"ENCOUNTER"

DESIGN FOR URBAN LONELINESS

4-"REINVENTING THE ANCIENT ROMAN COLOSSEUM"

CONVERSATIONS ACROSS TIME AND SPACE

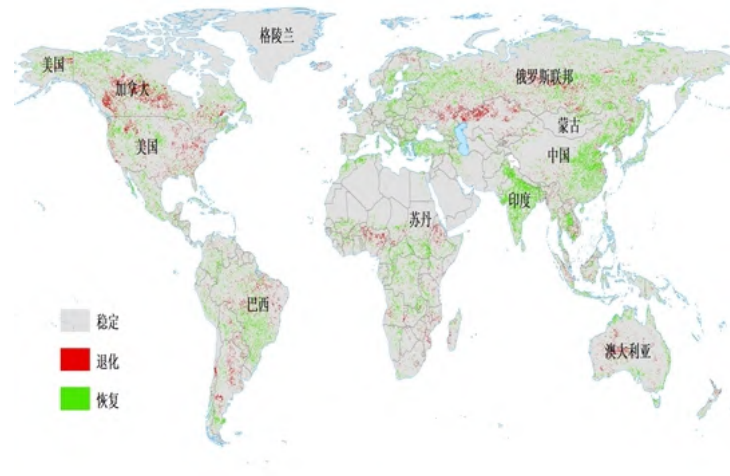


WELCOME TO BEEHIVE

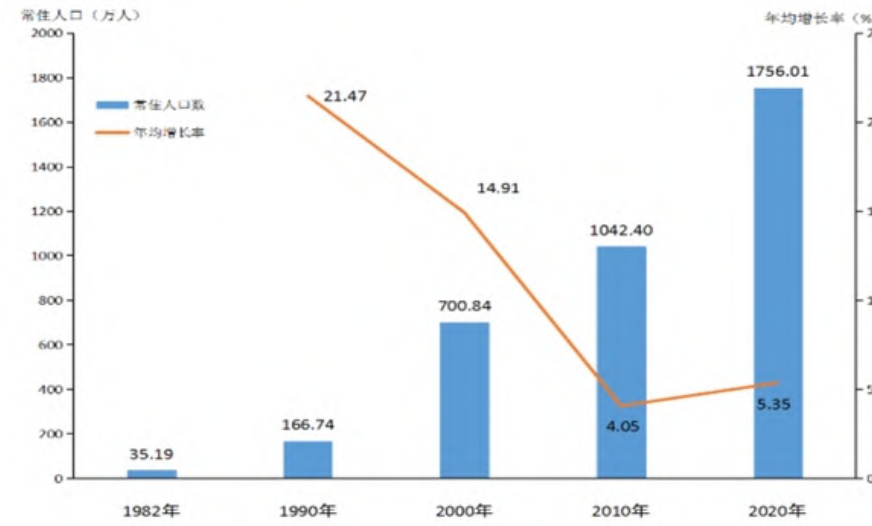
1-"BEEHIVE"

A FUTURE LIFESTYLE

“定性和定量分析的结果共同指向：在可预见的未来，住房问题会成为年轻人最大的负担。”



海平面上升



人口爆炸



天价房

“香港与东京给我们的启发”



Tokyo, Japan

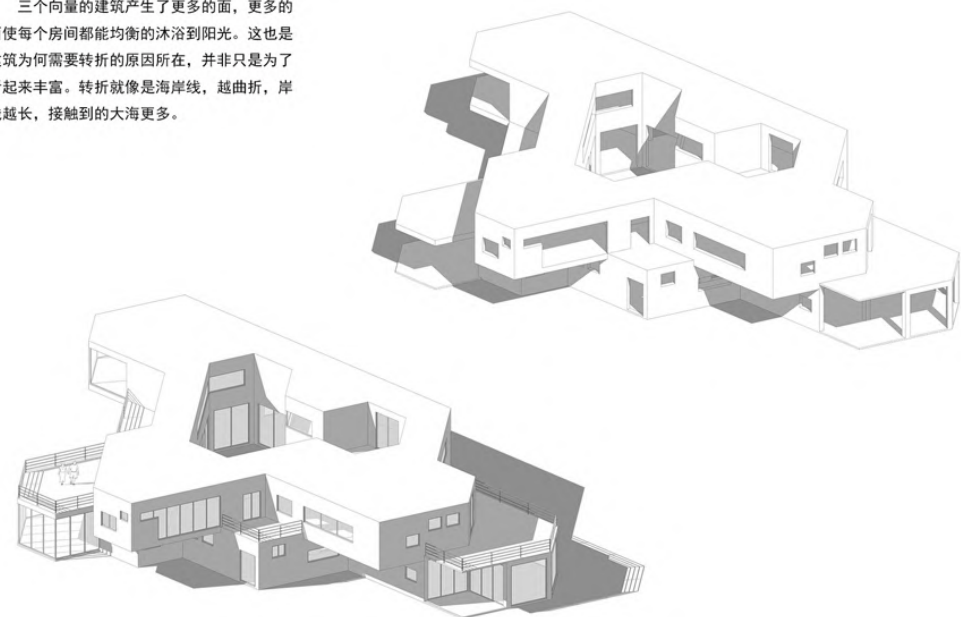


Hong Kong, China

1-"BEEHIVE"

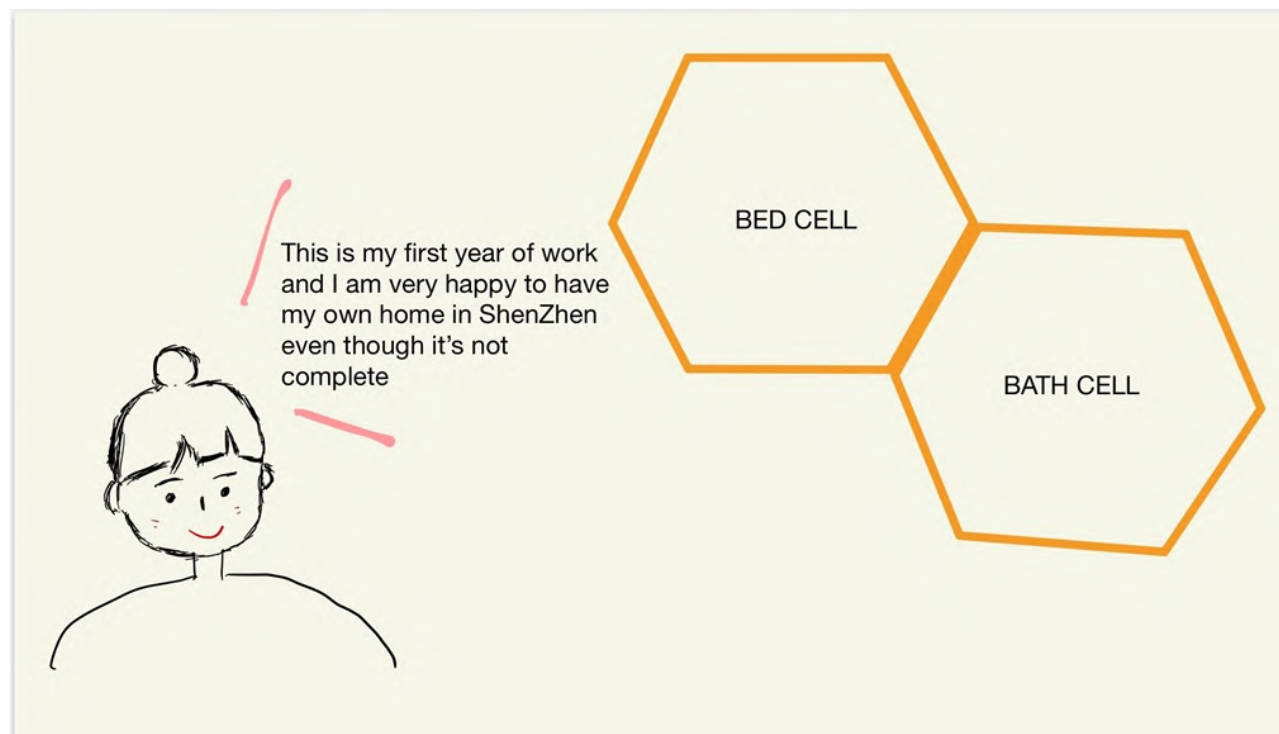
A FUTURE LIFESTYLE

三个向量的建筑产生了更多的面，更多的面使每个房间都能均衡的沐浴到阳光。这也是建筑为何需要转折的原因所在，并非只是为了看起来丰富。转折就像是海岸线，越曲折，岸线越长，接触到的大海更多。



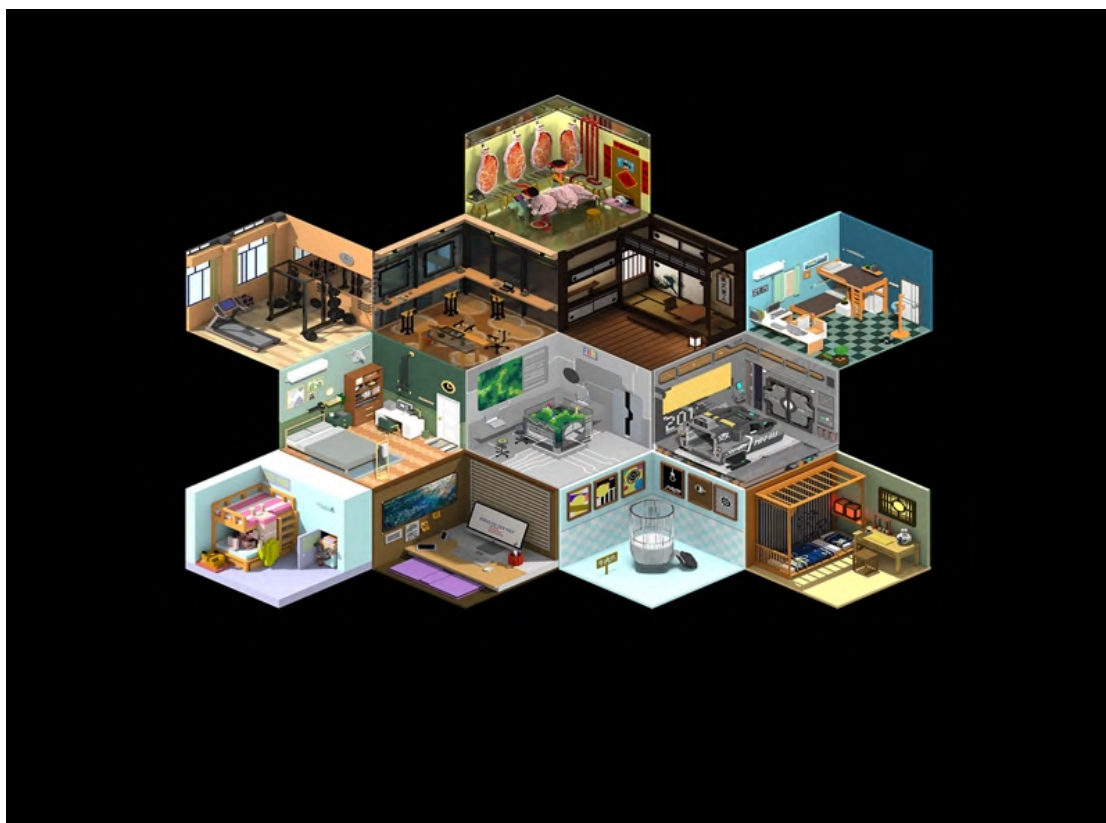
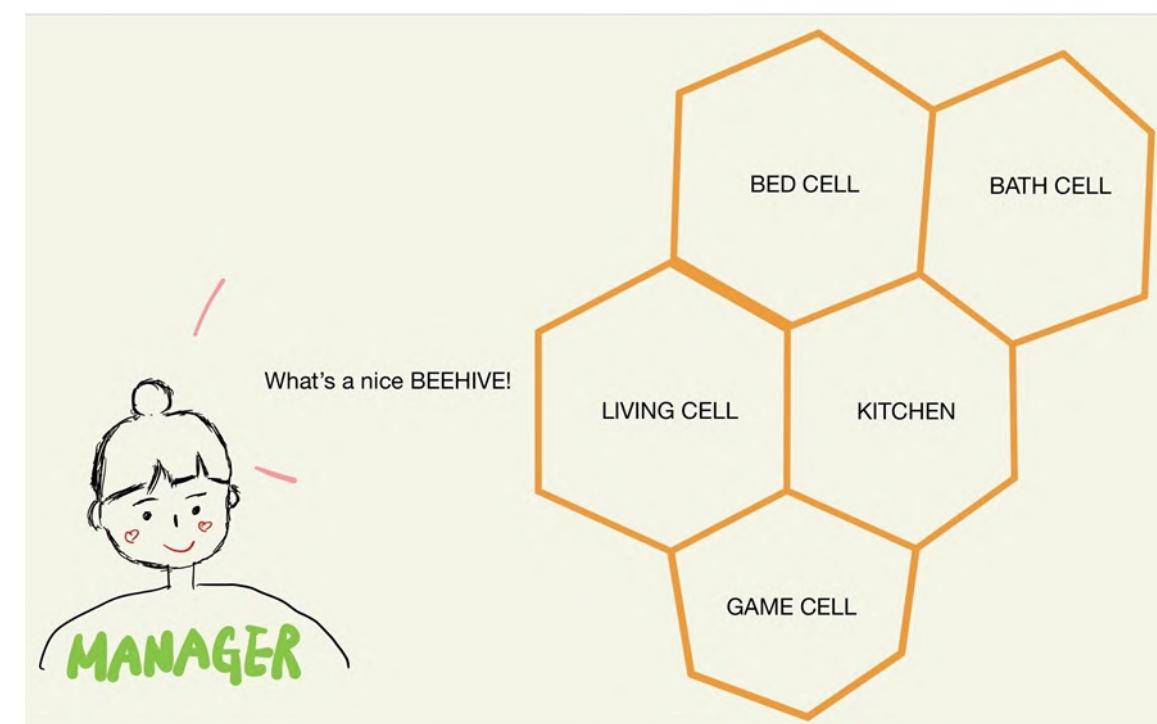
蜂巢式建筑

通过结合蜂房建筑以及模块化建筑理念，概念性的提出了共享式住房模式。年轻人在刚毕业时收入不够支撑去购买整个住房，可以模块化地去买断单一功能式的蜂巢单元。随着收入的增加可以继续买断其他功能的蜂巢单元，最终组成一个完整的家。



BEEBEE,在收入微薄时，买断了卧室单元和洗浴单元，以满足基本的生活需求

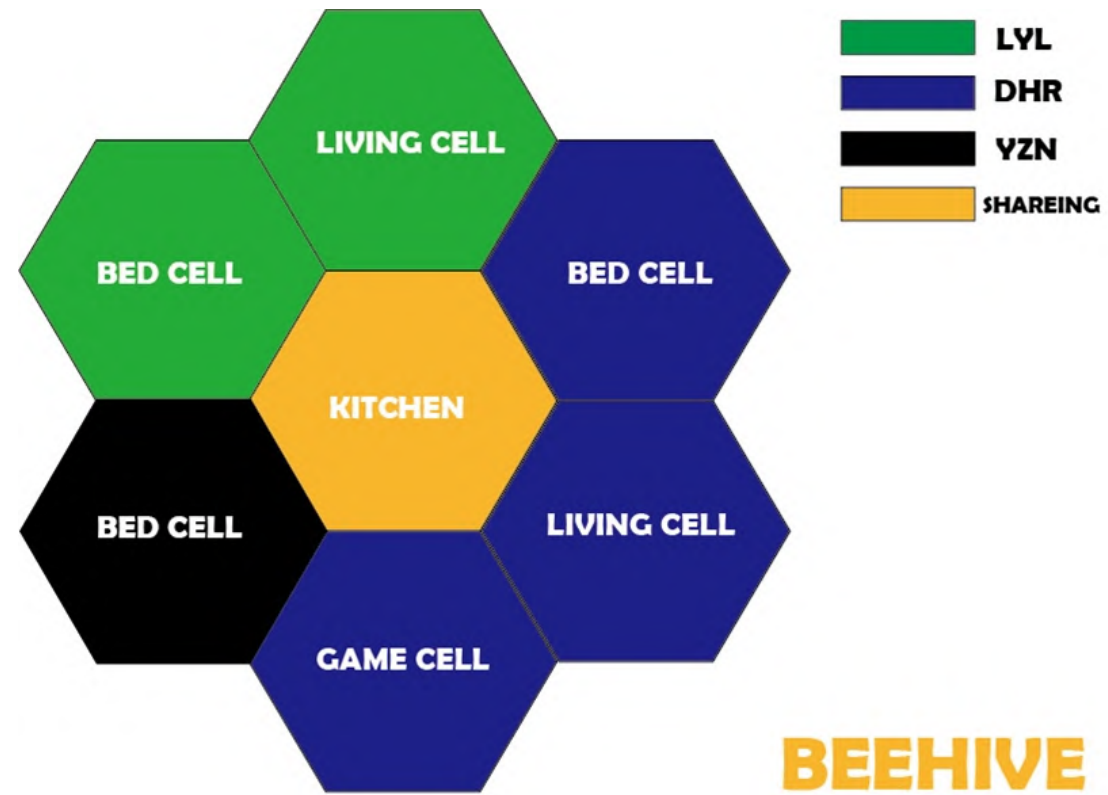
当BEEBEE成为了经理,她又购入了厨房、客厅、游戏屋、健身房等单元，生活变得更加多元化了。



模块化居住空间

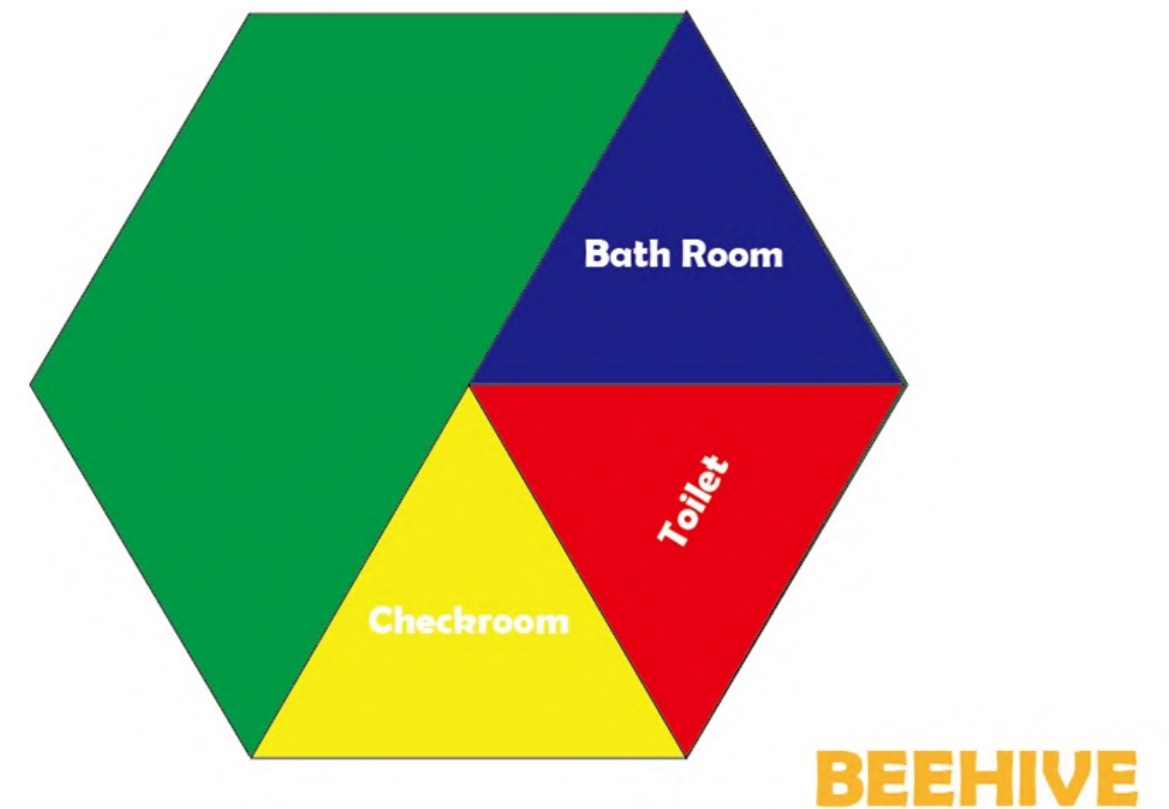
1-"BEEHIVE"

A FUTURE LIFESTYLE



在之后的设计中，设计师又融入了“共享”的概念，意味着在年轻人买房的初期可以通过共享一些使用频率不高的生活区域，以此来降低生活成本

这种“共享”也不仅仅只是应用于单元之间，在单个蜂巢的内部，也可以通过对空间的规划从而提高年轻人的生活质量。



1-"BEEHIVE"

A FUTURE LIFESTYLE

“流浪蜂巢”计划



也许在未来，技术的突破可以让房屋能够自由移动。这就意味着当你想要从你所工作的城市回到你的家乡，你仍然可以带着你的房子飞翔。。。在未来，希望可以构建出“蜂巢社区”，更或者是“蜂巢城市”。



POSEIDON PLAN

2-"POSEIDON PLAN"

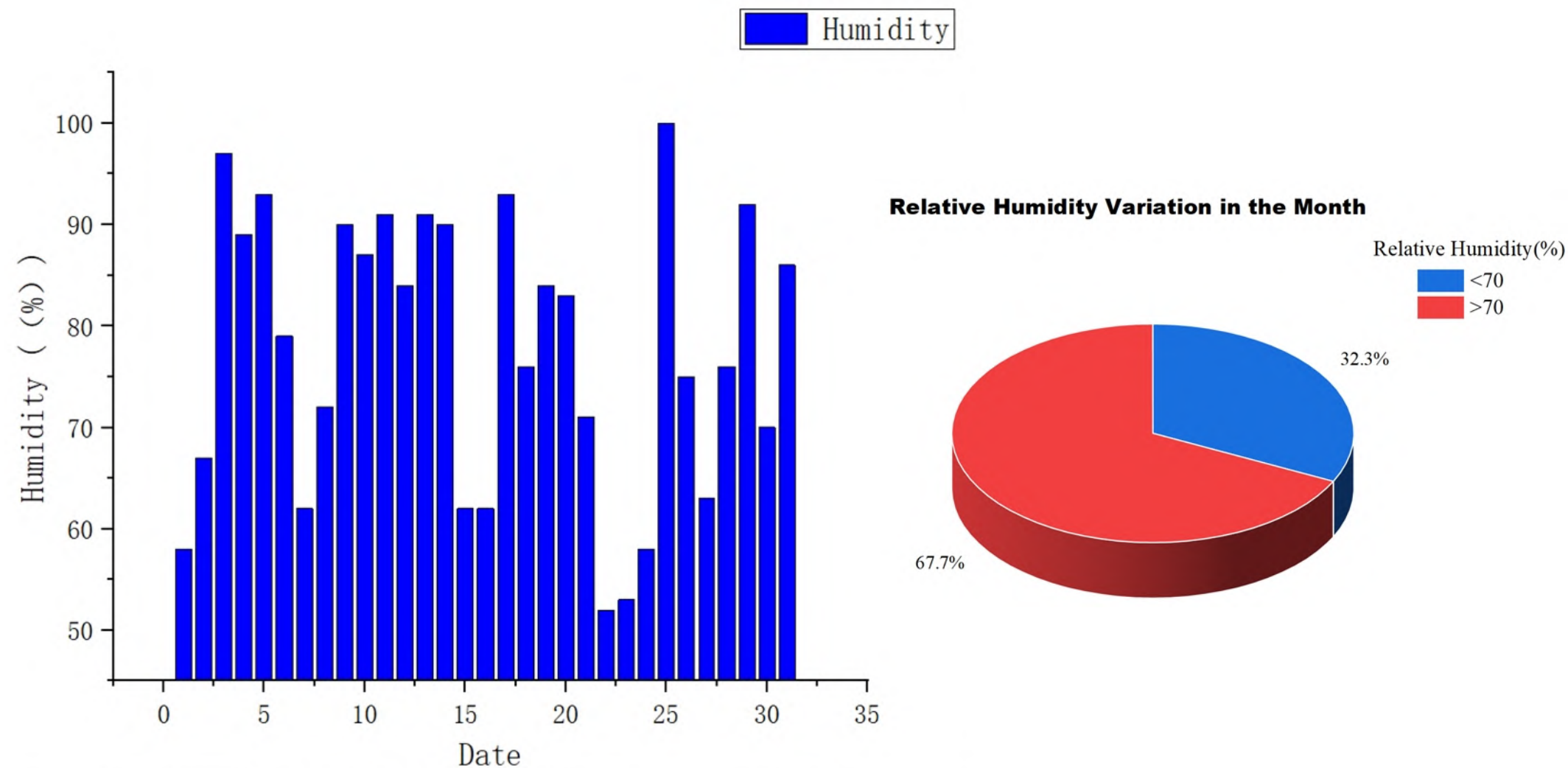
DOMESTIC HUMIDITY CONTR

现象：

在我国的南部地区，每年的特定季节的高湿度问题引起了我的注意。

于是我对从气象局下载到的数据进行了分析

统计数据显示深圳八月龙岗地区的湿度超过 70% 的天数，占比百分之 70。

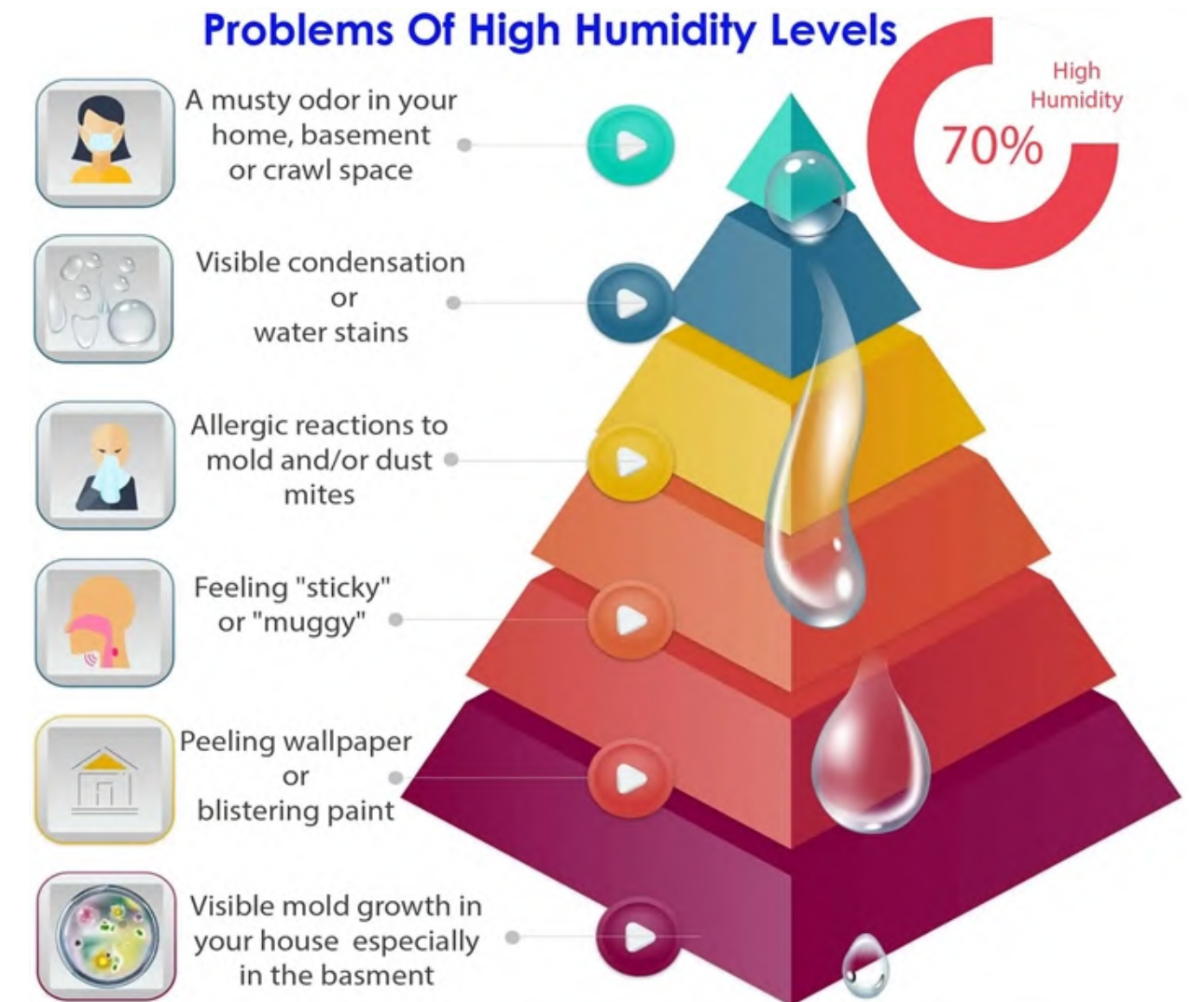


August 2022 humidity data for Guowei Village, Longgang, Shenzhen
Data source: Shenzhen Meteorological Bureau

Try Pitch

影响：

高湿度的环境会给我们的生活带了许多烦恼，如疾病、额外的心理压力、糟糕的睡眠甚至影响建筑本身。

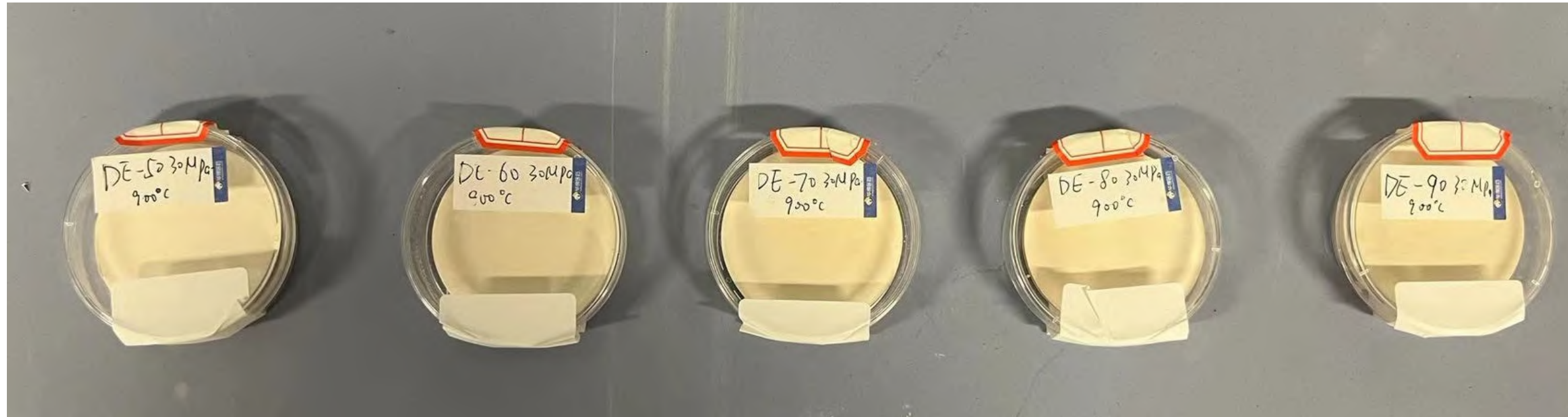


2-"POSEIDON PLAN"

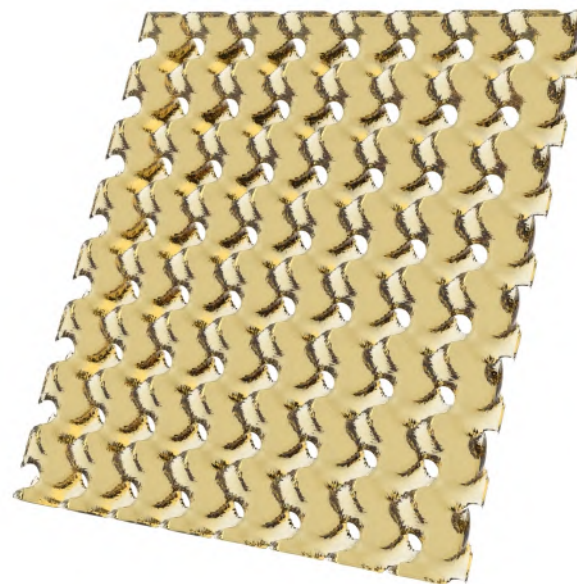
DOMESTIC HUMIDITY CONTR

"波塞冬计划"启动

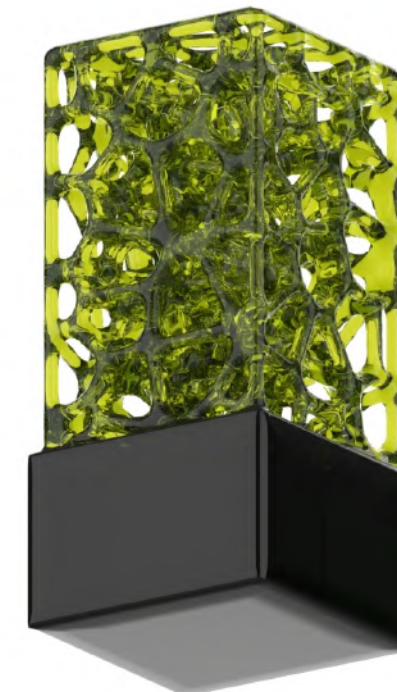
计划的第一步，因为我本科主修的是材料科学与工程，所以我在实验室中独立合成了以硅藻土为基础的复合型吸湿材料，经过测试材料可以直接从空气中捕获湿度，并且实现自循环。



计划的第二步，我开始以材料特性为导向，进行材料驱动式设计



三周期极小曲面吸湿砖



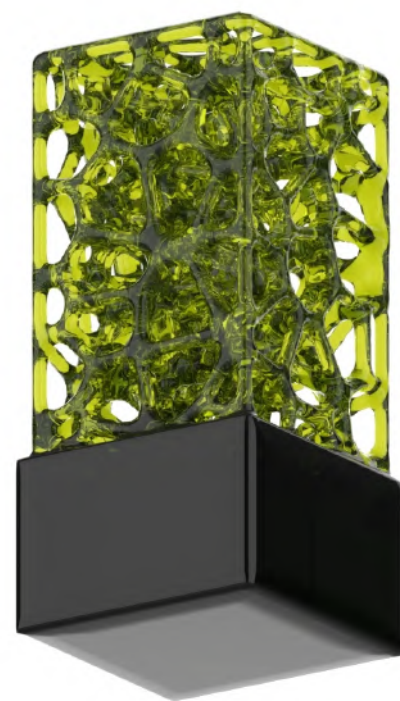
桌面吸湿沙漏

2-"POSEIDON PLAN"

DOMESTIC HUMIDITY CONTR

桌面吸湿沙漏

以开发出的吸湿材料为基础，吸湿沙漏分为上下两部分

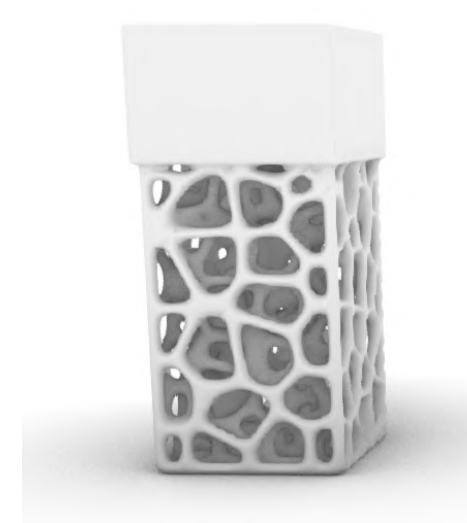
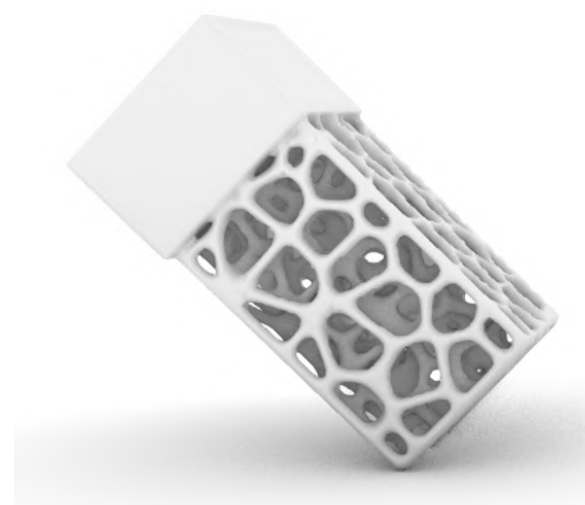


“上半部分的功能是吸湿”

通过创造孔隙与连续曲面增大吸湿材料与空气的接触面积，增加吸湿效率

“下半部分的功能是存储”

以实心的吸湿材料作为底座，被上半部分吸收的水分会因为重力而存储在下半部分里。



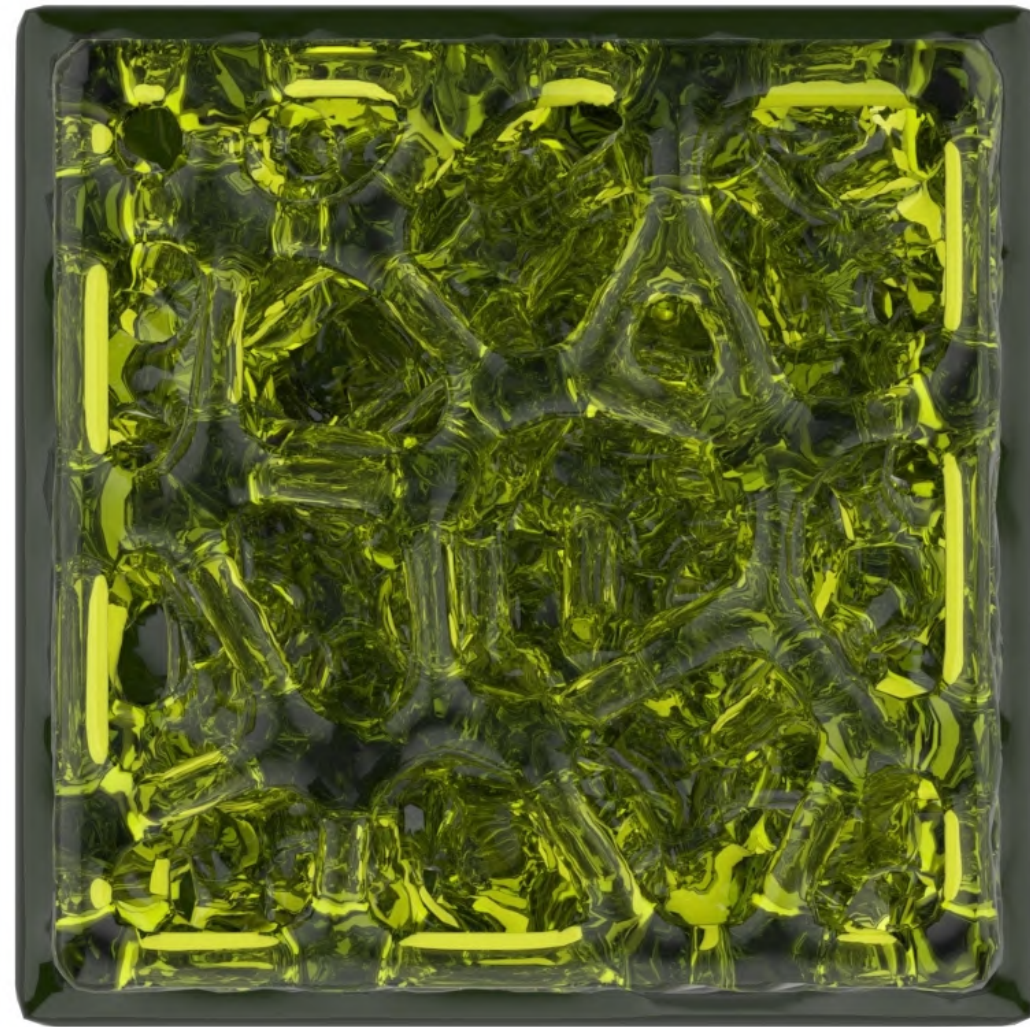
当环境湿度太高，用户感觉到不适时将吸湿沙漏正立，装置处于吸湿状态，捕获空气中湿度的同时，将其存储在实体部分中。

当用户感知到环境干燥，这时可将吸湿沙漏倒置于桌面上，被储存的水因为重力倒流至网状结构中，随着空气流动水分开始回到环境中。

2-"POSEIDON PLAN"

DOMESTIC HUMIDITY CONTR

桌面吸湿沙漏





ENCOUNTER

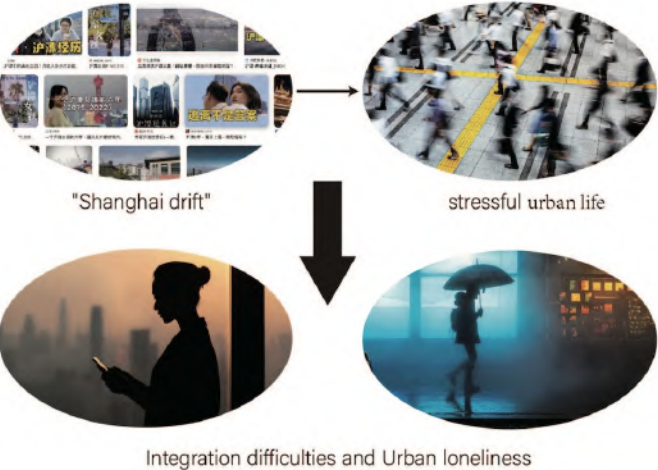
3-"ENCOUNTER"

DESIGN FOR URBAN LONELINESS

Re2023 Newal

TITLE | Encounter
TEAM | FiveH

Encounter - a product design to help alleviate urban loneliness



Project Background

Nowadays, many young people choose to work in big cities after completing their studies, and become "people away from home" who drift in the city.

Leaving your hometown means leaving your old social circle, and you will inevitably feel lonely in a new environment because of the **unfamiliarity and difficulty of integration**.

In the future, even though advanced technology has improved our quality of life, the **emotional need for the concept of home** still needs to be taken seriously.

User Research

Scenario
After graduating from university, Li Hua has entered Shanghai, an unfamiliar city, to join the workforce. He rented a house and moved into a new neighborhood to start his new life in Shanghai.

Expectations
Make new friends with like-minded people in your new community so that you can quickly integrate into the city and feel a sense of belonging.

Phases	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Tasks	• Move into a new house in Shanghai • Get ready to start work	• Struggle after starting work • The original social circle is far away	• Struggle in the world of the internet • Hard to chat with friends • Find someone to chat with	• Small talks with people • Help and being helped • Find someone to chat with	• They will work • Get to know and understand others with people you just met but don't know well
Thoughts	"Shanghai is a big and dynamic city. I want to start my new life here."	"I miss my old friends, and now I have no one to play with."	"It's not easy to find someone to talk to. I'd like to have someone to hang out with in my new city."	"It's not easy to find interesting people around me who can become friends."	"I've known each other but as if I don't know, I'd like to know each other and become good friends that we can trust and rely on."
Emotions	😊	😞	😞	😊	😊
Opp.	• Enhance the experience of social life in a new house	• Help him better interact with old friends at a distance	• Help him make new friends	• Help him deepen his connection with new potential friends	• Help him consolidate the friendship with his new friends into deeper and more solid relationships, helping him to feel more at home in the city

Li Hua
The main character

Age: 25
Occupation: Hotel attendant
Location: Shanghai
Education Background: University graduation
Background: Recently arrived in Shanghai.

Personality

Extrovert
Creative
Kind
Organized
Active
Relax

Basic information
Li Hua is outgoing and loves to make friends. He has many good friends in his hometown during his school years, but since he graduated and came to Shanghai, his former friends hardly live in the same city as him, and he is still very unfamiliar with the city and the community he lives in, so he is eager to make new friends in this new city who can lead him to integrate into this new environment quickly.

Product Concept



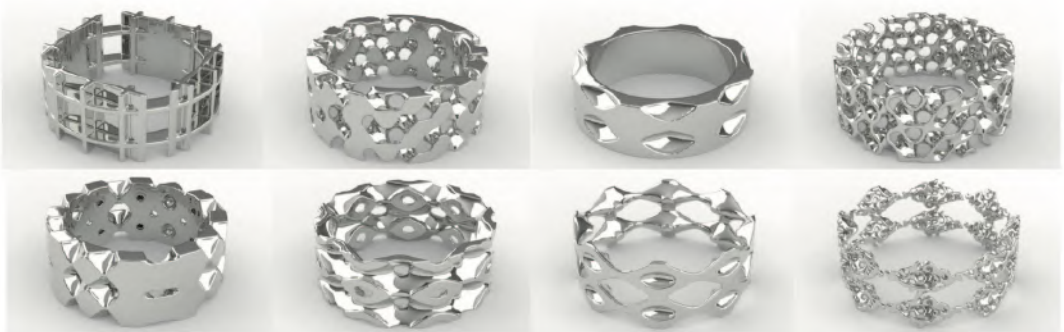
There are many moments in daily life when two people who do not know each other have a little chat, so why not use this as an opportunity to get to know each other a little better?

SO, we wanted to design a **smart ring, combined with an app**, to allow young people who have just entered an unfamiliar city to deepen their connection with the city by **not missing out on the casual encounters in their daily lives**.



MEMBERS | Xu Yingxin | Huang Jiali | Xieraili Ougezihan | Lu Ying | Yao Zhennan
SCHOOLS | South University of Science and Technology of China | Jiangnan University | Shanghai JiaoTong University | Beihang University | South University of Science and Technology of China

Final Display



Smart Rings

UI Design

Home page | Message

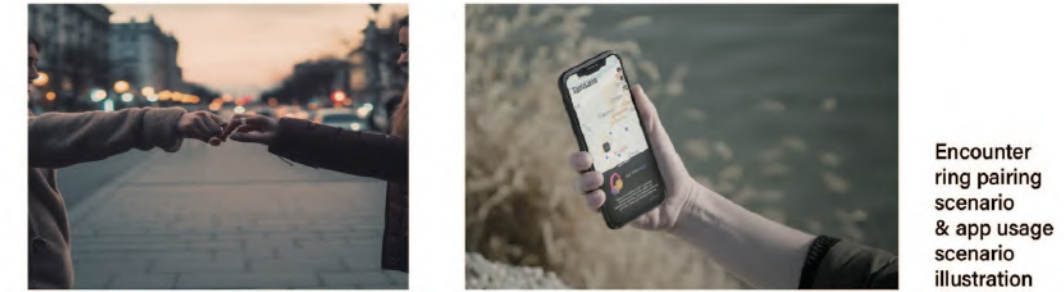
Layers | Map | Setting | Anonymity

Friends | Activity | Friends invited

Basic information | Topic | Description | Location

Source cards | Task and rewards

Application Scenarios



ENCOUNTER

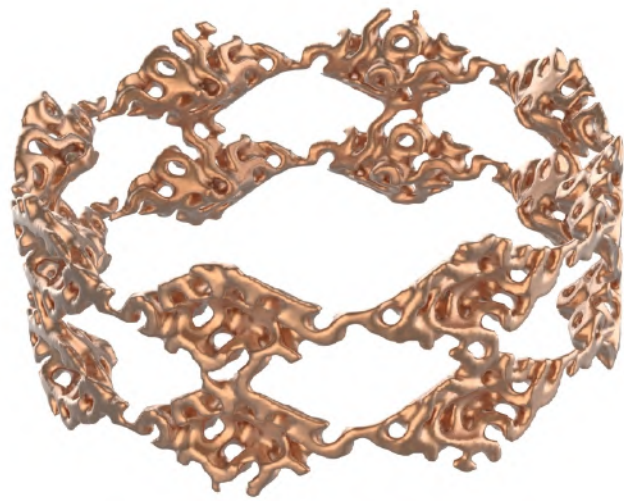
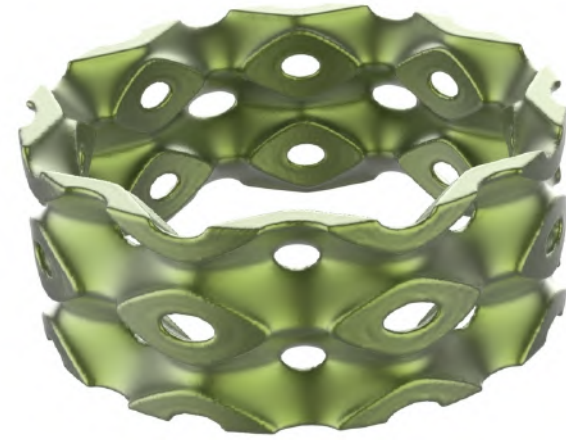
上海交通大学“FourC Challenge 24-hour Design Charrette”
Final List

这是在一个24小时的设计比赛中孵化出的项目，重点聚焦于年轻人在陌生城市时常会失去社交欲望。设计团队通过软件+硬件的模式，在仔细分析了用户习惯后，开发出了一套完备的社交app，软件会通过收集地理位置的数据去计算你于陌生人的缘分值，也许你和“他/她”，并不只一次偶遇。

硬件部分的外形由我进行设计，在满足功能需求的同时赋予了硬件潮流属性。被称为“性格戒指”，通过软件内置的性格测试，用户将被分配到不同外观的戒指，当用户在偶遇中碰到佩戴相同戒指的那个他/她，这个戒指也许也是促进你们关系的第一把火。

3-"ENCOUNTER" DESIGN FOR URBAN LONELINESS

"自然韵律" (Natural Harmony)



"灵感之环" (Inspiration Loop)



"永恒之约" (Eternal Covenant)

ENCOUNTER

上海交通大学"FourC Challenge 24-hour
Design Charrette"
Final List

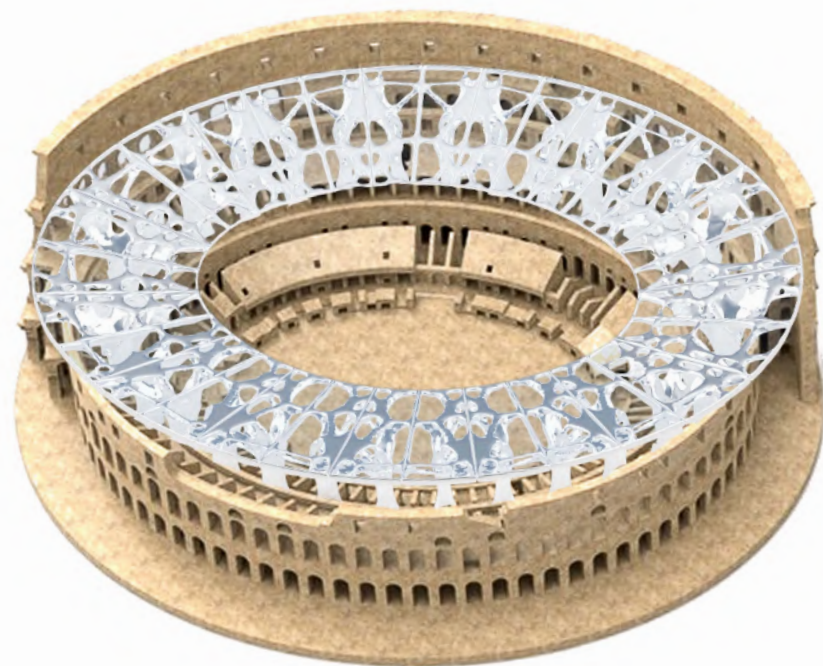


REINVENTING

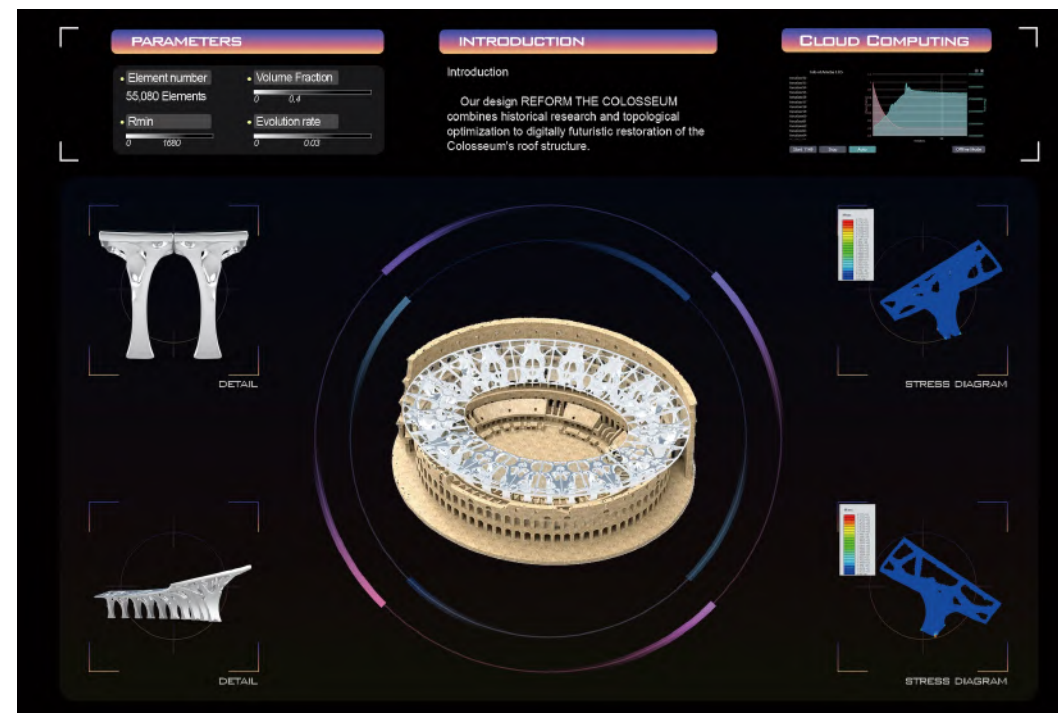
4-"REINVENTING THE ANCIENT ROMAN COLOSSEUM" CONVERSATIONS ACROSS TIME AND SPACE

同济大学“DIGITAL FUTURE WORKSHOP” 浮现成形：基于拓扑优化的设计与建构

我们团队受到大跨度建筑改造的启发，抛开专注于现代建筑改造的定式思路。从艺术和技术的双重角度，通过拓扑优化悬挑结构，在已经残破的古罗马斗兽场上进行了二次复原。
我在这项改造设计中负责了悬挑结构的拓扑优化设计。



拓扑优化过程



渲染效果



4-"REINVENTING THE ANCIENT ROMAN COLOSSEUM" CONVERSATIONS ACROSS TIME AND SPACE

同济大学“DIGITAL FUTURE WORKSHOP”

浮现成形：基于拓扑优化的设计与建构



3D打印模型

