

**hi, i'm
cole.**

I am a creative technologist.

I use design thinking to make life better.

I sketch, 3D model, and fabricate physical products.

I also design, code, and prototype digital experiences.

space board

Sharing conference rooms in public offices is hard. It's easy to lose track of time in an important meeting, and it's uncomfortable interrupting meetings that are running long.

Spaceboard is a system of hardware, mobile app, and digital signage that helps alleviate the friction that comes with sharing spaces on a tight schedule.

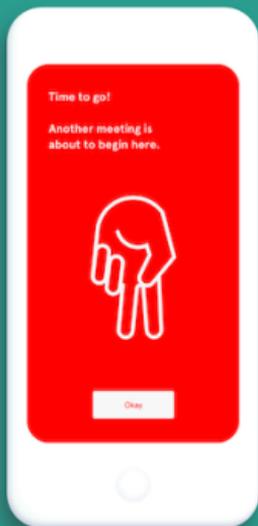
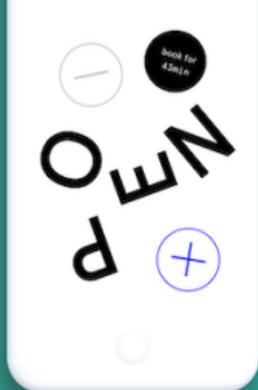
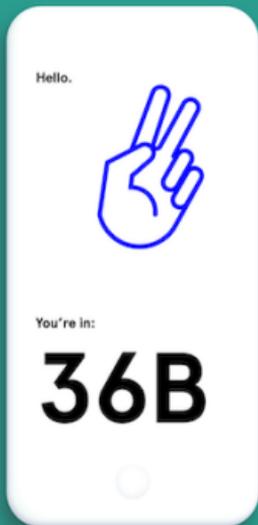


I designed, programmed, and fabricated a 'digital hourglass' that sits on the table in meeting rooms. This functional prototype was user tested in buildings, responding to live data via webhooks on a raspberry pi zero.

A ring of lights indicates to everyone in a meeting how much time is left. The lights pulse when it is time to pack up and leave.

It also serves as the touch point for Spaceboard, which lets members control the lights, tv, and hvac in rooms they book.





Spaceboard employs the 'Spartan' design system. We developed Spartan for rapid prototyping and user testing.

Its simplicity allowed us to spin up fully functional prototypes of Spaceboard interactions in just a day or two each.

Room 3A

Time to wrap up!
A meeting is about to
begin at 3:30.

I also designed & programmed a dynamic meeting room display using React. It interfaces with Spaceboard and allows the space to 'talk back' to members.

I coordinated the rollout of this display in several buildings, managing onsite teams to gather data and improve the design through user feedback.

hot desk

'Hot desks' are first-come-first-serve workspaces in WeWork buildings, but it's often hard for members to find an empty one.

'Caliente' is a smart desk for shared offices that can be reserved in advance. An app finds empty workspace nearby and members book the desk from their phone. They can easily check in with a tap when they arrive.

As the lead industrial designer for this project, I coordinated with Astro Studios and Tact Product Development.

With the three groups working together, we delivered this smart desk on a rush schedule - in only 6 months from concept to install.





When members approach the desk, it wakes up, inviting them to tap their membership card. After one tap, the desk displays their name and adjusts to their preferred height.

Presence and weight sensors know when they leave and check them out automatically.



INDICATOR LIGHTS

Indicator lights appear and disappear as needed. They only appear when the user's attention or input is required, never indicating inactive states.



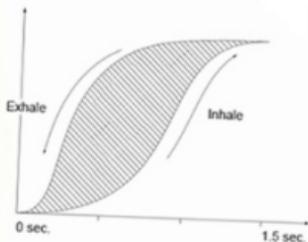
Call To Action



Processing



Broken



To call a user to action, an indicator light may slowly 'breathe' based on a respiration curve. This draws attention without being distracting.

This was WeWork's first manufactured product.

I developed a brand language for WeWork object design.

Because our design direction was changing so quickly, I created a design guide as a deck of cards.

Guidelines could be added and removed from the deck to suit the needs of a growing company.

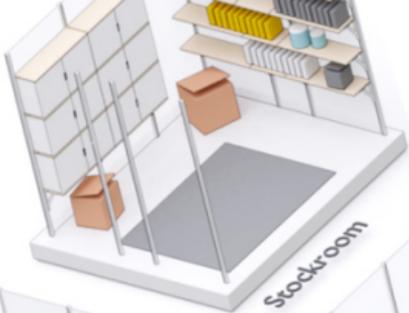
mode mods

The first of the month is move-in/move-out day at every WeWork building. One of the most difficult parts of the day is helping members move furniture up the elevator.

We designed and built a suite of modular furniture that is flatpacked, shipped, and wall mounted onto a standard glass mullion system. All *before* move-in day.



Private Meeting



Stockroom



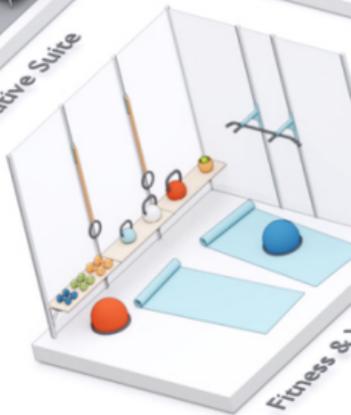
Private Office



Executive Suite



Innovation Lab



Fitness & Wellness

I coordinated with a developer to create a LEGO-like tool for designing offices using MODE mods. It was built to allow members to design their offices before move-in day.



Design your Office

mobile > surface > whiteboards



Mobile Desk
Movable workspace for team collaboration or solo work.

\$300



Whiteboard + Tray
Collaboration tool with a full size whiteboard on one side and half size on the other.

\$200



Acoustic Divider
Lower noise levels in your office for greater privacy on calls.

\$150

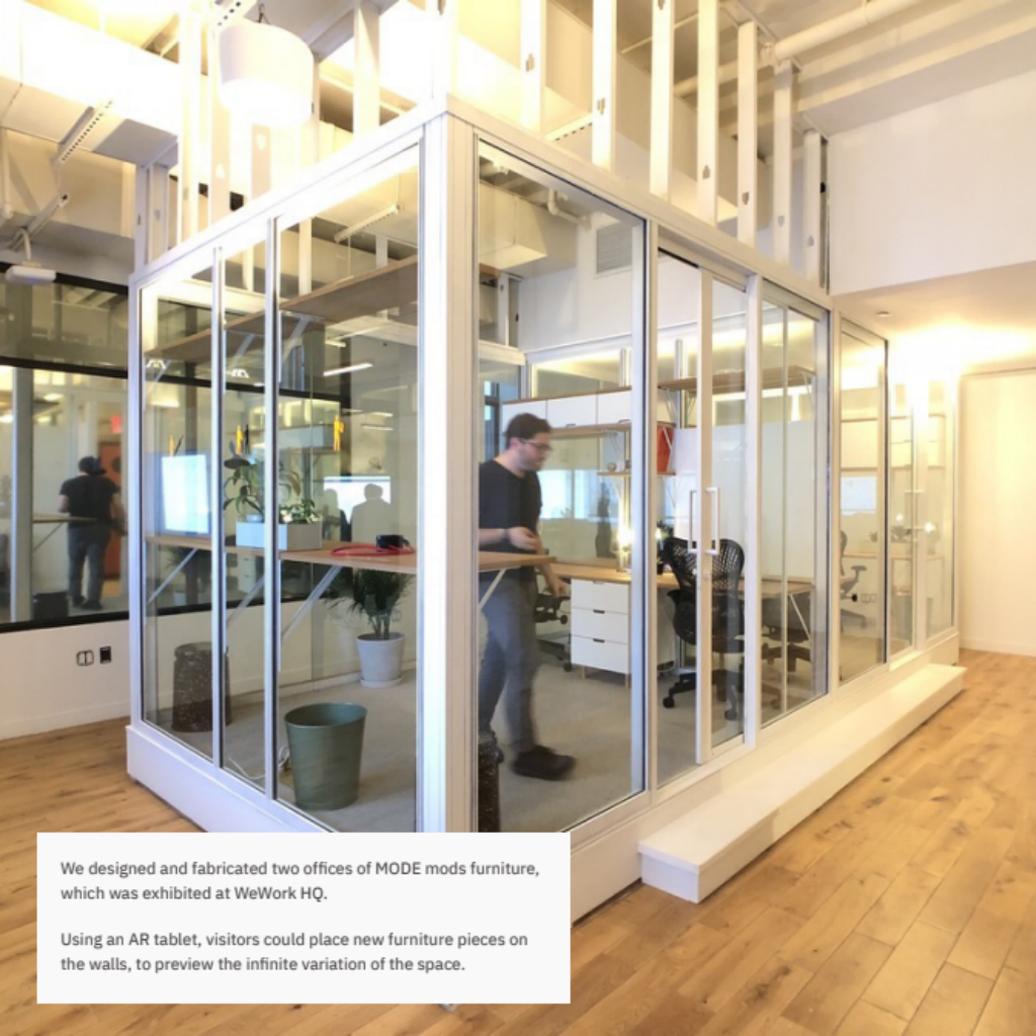


MOOD Desk Shelves
Small storage unit for personal items.





In larger offices, exclusively wall mounted furniture doesn't cut it. **MODE mods** also features a movable furniture rack that accepts the same modules.



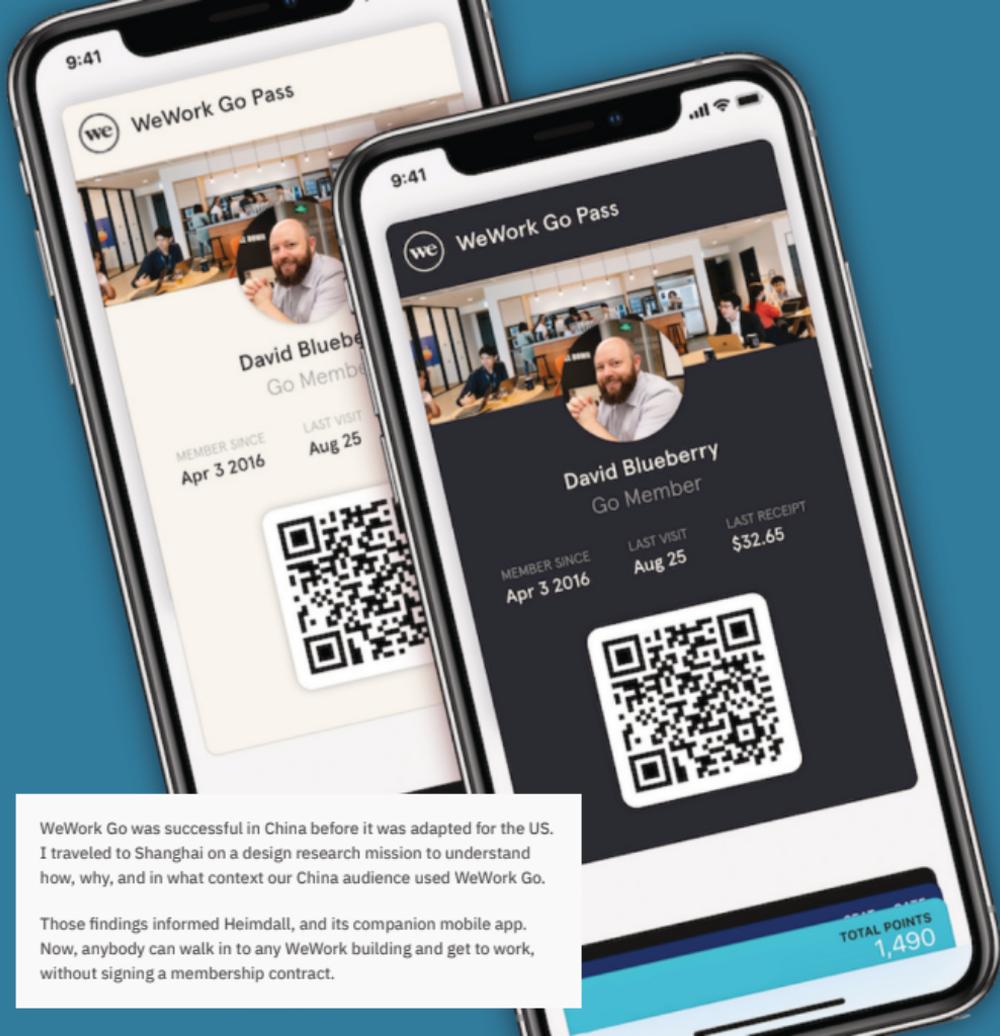
We designed and fabricated two offices of MODE mods furniture, which was exhibited at WeWork HQ.

Using an AR tablet, visitors could place new furniture pieces on the walls, to preview the infinite variation of the space.

heim dall

WeWork Go was built to open up WeWork spaces to anyone walking in off the street. This was a great initiative, but overwhelmed doormen, and frustrated members.

Heimdall is a large tablet display that lets people waltz into the office without stopping to check in. As they walk past, a camera reads their QR code from up to 15 feet away.



WeWork Go was successful in China before it was adapted for the US. I traveled to Shanghai on a design research mission to understand how, why, and in what context our China audience used WeWork Go.

Those findings informed Heimdall, and its companion mobile app. Now, anybody can walk in to any WeWork building and get to work, without signing a membership contract.

TOTAL POINTS
1,490



Welcome to
205 Hudson

can your pass to sign in.

et's
Go.

WeWork Go means flexibility.
Your own workspace, where and when you need it.
Scan now for unlimited access in New York.
Your first day is on us.

Let's
Go.

WeWork Go means flexibility.
Your own workspace, where and when you need it.
Scan now for unlimited access in New York.
Your first day is on us.

Heimdall is a large tablet display with no need for a touch screen.

Users hold up a QR code on their phone as they walk through the building lobby.

Heimdall also greets new members, and walks them through the onboarding flow.



Thanks for
visiting,
Vid!

You're checked out.
Your total cost was \$33.
See you again soon!

Let's
Go.

WeWork Go means flexibility.
Your own workspace, where and when you need it.
Scan now for unlimited access in New York.
Your first day is on us.



This is the mobile app companion to Heimdall.

I designed and prototyped a Citibike-inspired app for finding available buildings using React.

This interactive prototype was inspiration for the US version of WeWork Go, the current on-demand offering.



yay btn

Direct feedback from WeWork members often concerns specific building problems, rather than broader WeWork service issues.

Using surplus Amazon Dash buttons, we superpowered the customer feedback kiosk. By sticking buttons all over the place, our data was granular enough to identify the 'thousand cuts' in the user experience.

CONFERENCE ROOM





YAY buttons had a tiny budget. I led manufacturing of the buttons in-house, by hand, with a team of 4 other UX designers.

We developed a simple webapp to speed up the process of provisioning the buttons, mounting them into the enclosures, and placing labels on the enclosures.

We went through several iterations of YAY buttons before arriving at the simple CNC-routed enclosure.

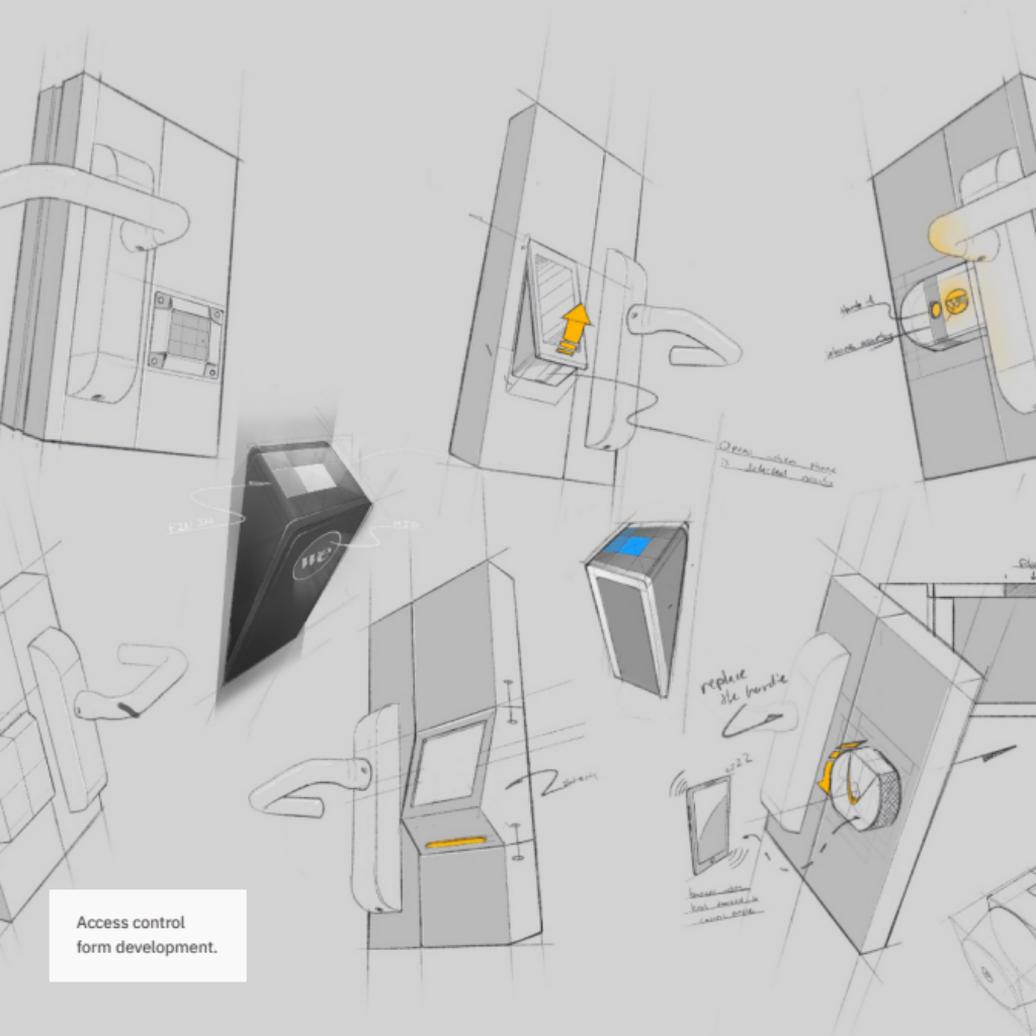




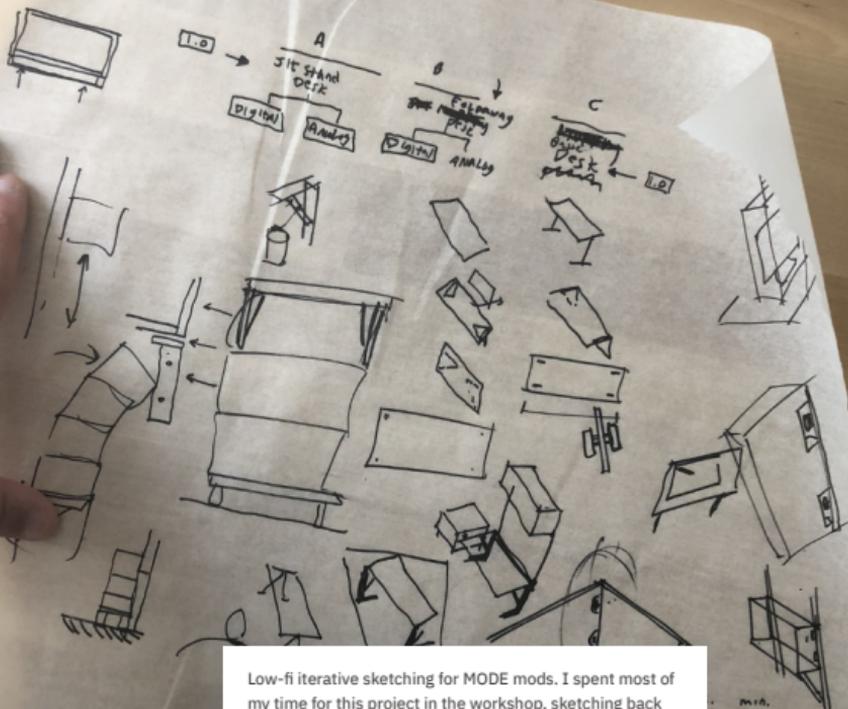
The huge quantity of feedback points gave YAY data surprising granularity. We were able to pinpoint individual problems with restrooms, printers, and elevators. We were even able to identify this building's favorite beer. If you're curious, it was an IPA.

sketching

Hand sketching is a crucial part of my process. It's how I communicate to clients and fellow designers, and it's a fast way to iterate ideas before moving to a computer.



Access control
form development.



Low-fi iterative sketching for MODE mods. I spent most of my time for this project in the workshop, sketching back and forth with the fabricator.



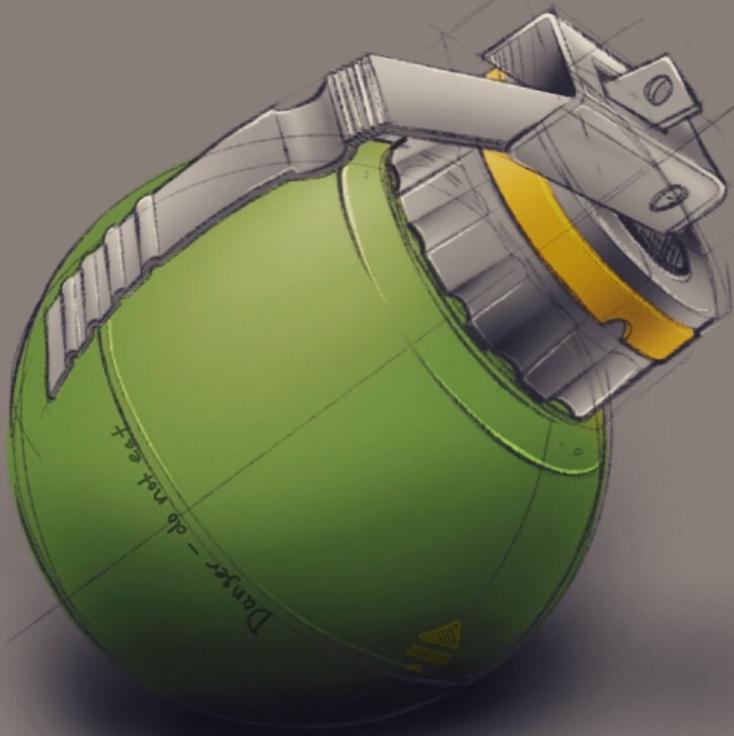
Spaceboard storyboarding, used to plan out interactions before Arduino prototyping.



CHECK TO
REMEMBER



BLEND
WITH

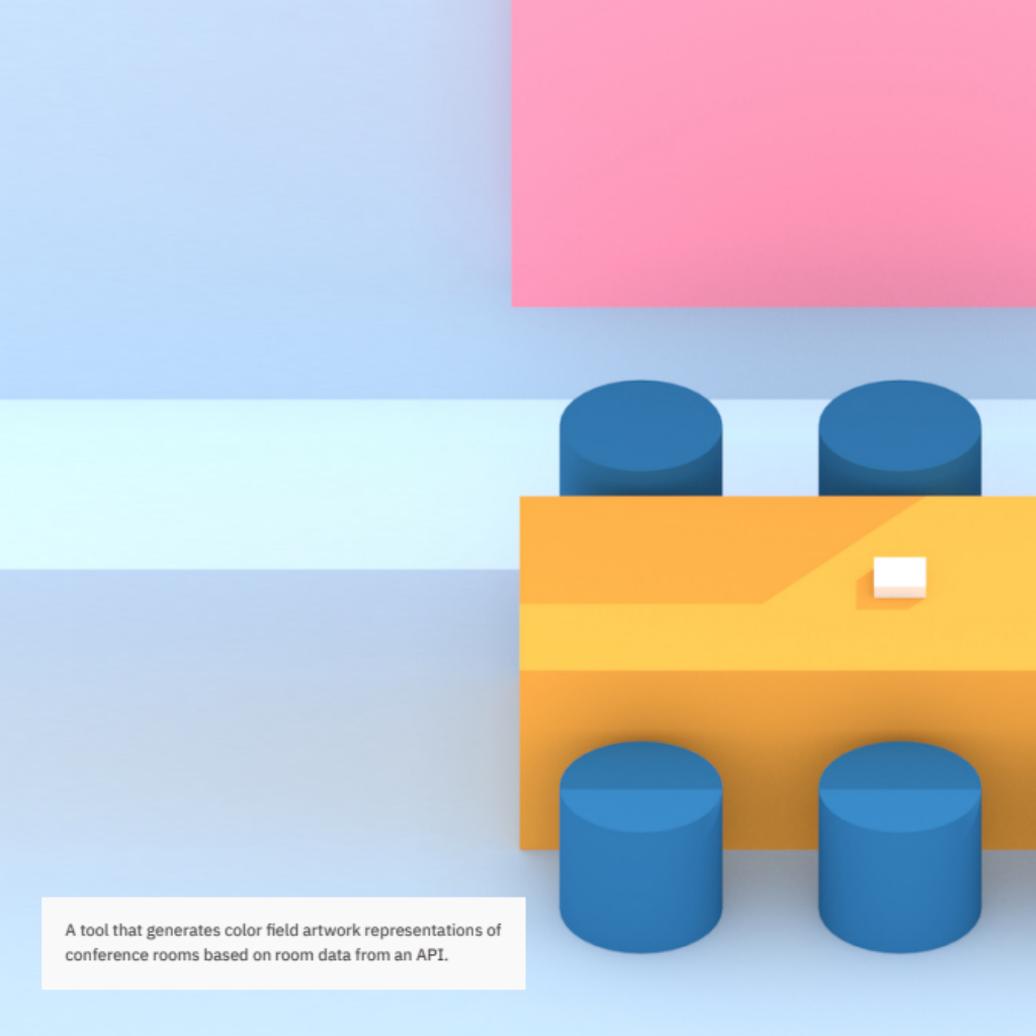


Video game
concept art.

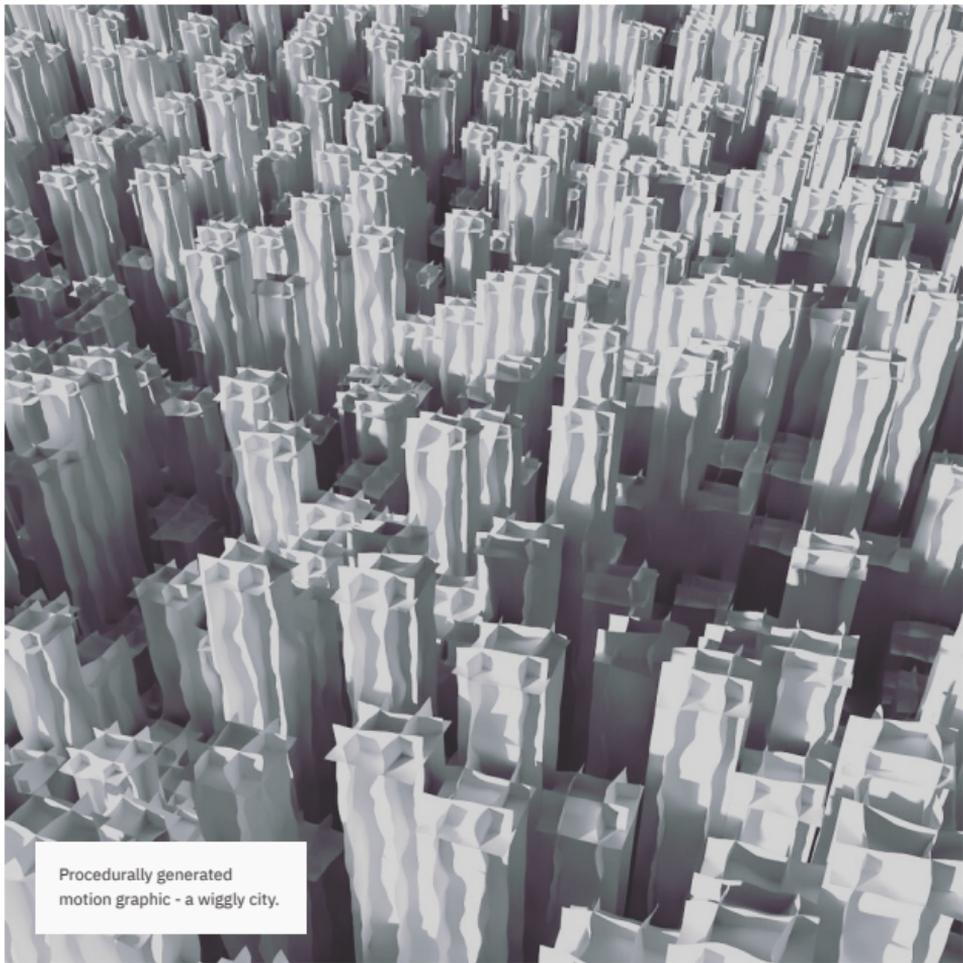
other stuff

A selection of other projects - freelance, personal, or otherwise.

I'm fortunate to be able to use my skillset to work on a huge variety of projects, from saltshakers to video games.



A tool that generates color field artwork representations of conference rooms based on room data from an API.



Procedurally generated
motion graphic - a wiggly city.



A beer tap with built-in chalkboard, to show the beer of the week.

This tap is still the standard in WeWork buildings, but now is used label non-alcoholic beverages like sparkling water and kombucha.

**thank
you**

let's work together.

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