

john swain
INDUSTRIAL DESIGN

john swain

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Oxford, OH 45056

education

University of Cincinnati, DAAP

College of Design, Architecture,
Art and Planning
BS, Industrial Design, 2017
Dean's List

Sinclair Community College

Dayton, Ohio
Certificate, Desktop Publishing, 2012

Colby College

Waterville, Maine
BA, Psychology, neuroscience, 2008
NCAA cross-country skiing and running

experience

Ethicon

Design Intern
Cincinnati, Ohio
January–May, 2016

ECCO Design

Design Intern
New York, New York
May–August, 2015

Yellow Window

Design Intern
Antwerp, Belgium
September–November, 2014

Industry

Design Intern
Portland, Oregon
January–May, 2014

Logic PD

Design Intern
Minneapolis, Minnesota
June–August, 2013

Loppet Foundation

Youth Coach and Event Coordinator
Minneapolis, Minnesota
September 2009–September 2011

skills

design skills

design strategy
design research
sketching
rendering
model making
photography
typography
Adobe Photoshop
Adobe Illustrator
Adobe Indesign
Solidworks
Alias Automotive
Rhino
Keyshot
V-ray
Mudbox

interests

cross-country ski racing
mountain biking
long-distance running
ultimate frisbee

**ASTER
LOUNGE**



inspiration

I took inspiration from contemporary lighting, housewares and synth pop music. I was attracted to forms that are expressive and sensual but also simplified and controlled. **Controlled curves, machined exuberance, synth pop.**

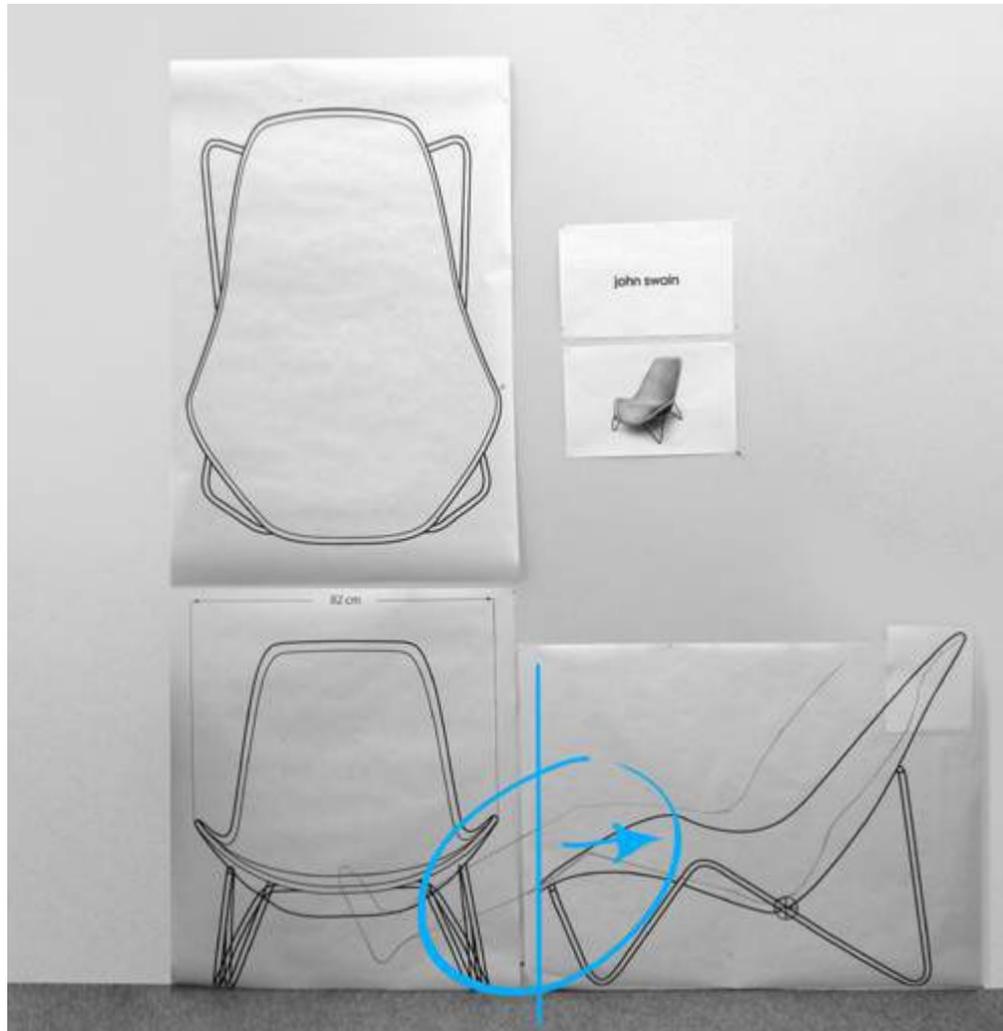


design development

I ended up combining the proportions of one of the concepts with the form of another and continued realizing the design in full-scale drawings, sketches and a 1/4 scale model.



refinement



full-scale drawings

I printed out full-scale orthographic drawings and traced a 95th percentile male outline on the side view to check if the back rest was high enough. I shortened the seat after realizing that the chair would either need to be bigger or smaller to support the feet properly.



1/4 scale model

I 3D printed a mock-up of the seat and bent a steel beam for the legs using an acetylene torch and a mallet. I was still considering making the legs out of bent steel beams, but I decided on rods in order to make production more affordable.

full-scale prototyping



ergonomic testing

After testing the sittable model, I found that the seat position was too far reclined, so I moved the backrest angle forward to allow for a more upright position.

seat fabrication



CNC milled foam



sanding



priming



fiberglass lamination



3/4 in tube bending



tube section welding



rubber casting



assembly



fabric patterning







upholstery

I had the chair upholstered by Orange Chair in Cincinnati. They glued and stapled the foam and fabric to the fiberglass shell.

leg joints

I had the steel tubes nickel plated at Leonhardt Plating Company in Cincinnati. The legs are screwed into metal plates that were laminated into the fiberglass and supported by rubber grommets. The back of the chair has a custom-molded rubber grommet.







StrideMate

reducing running impact

The Stridemate was invented by a friend of mine who had knee pain from running too much. His physical therapist suggested he change his running stride using a few simple cues and he was able to run without pain. During the process, it occurred to him that it would be possible to build a device that uses an accelerometer to monitor running mechanics and give the user real-time feedback to correct their running stride.

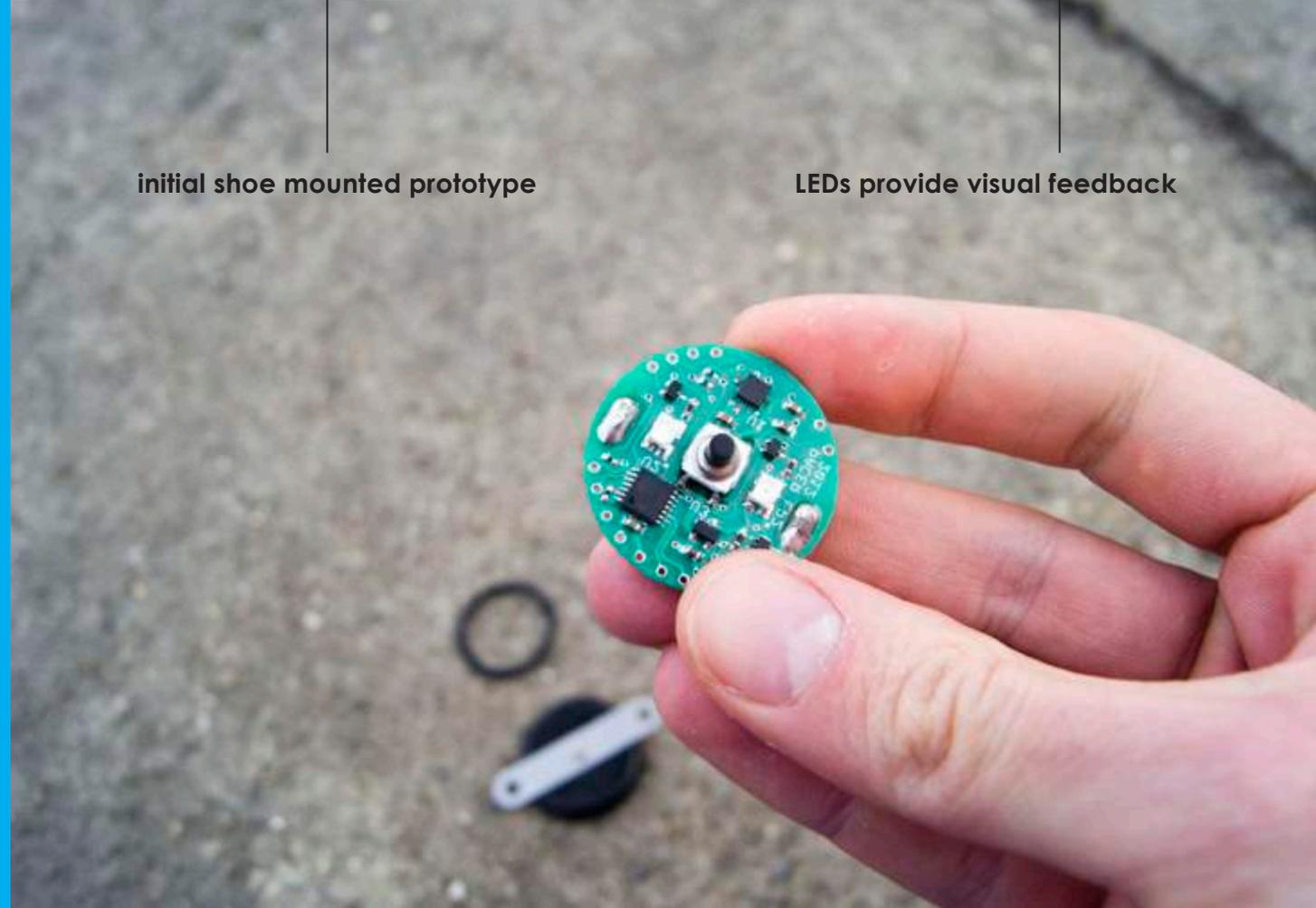
He and some business partners produced a working prototype, and he asked me to do the industrial design.

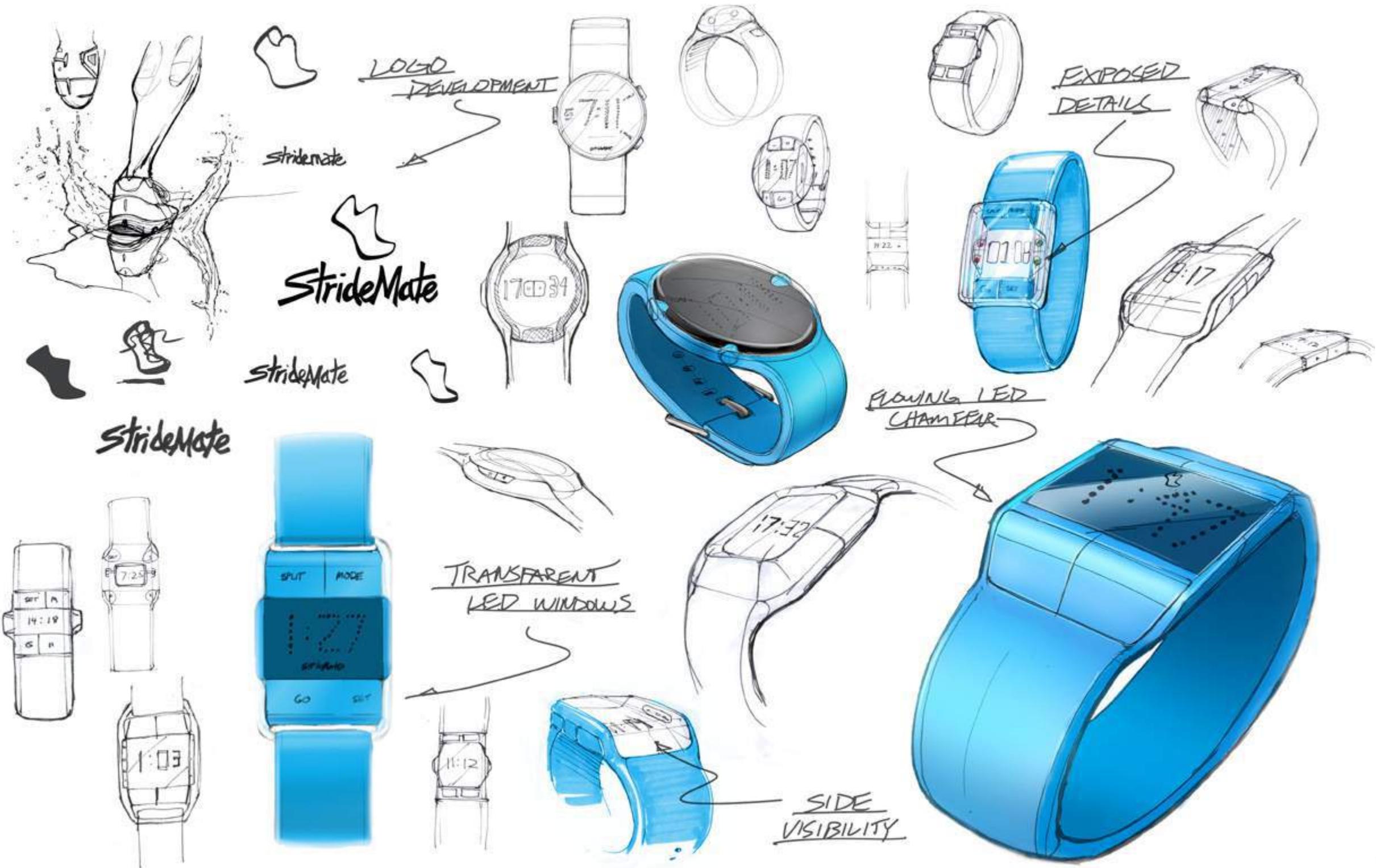


initial shoe mounted prototype



LEDs provide visual feedback





LOGO DEVELOPMENT

EXPOSED DETAILS

StrideMate

StrideMate

StrideMate

StrideMate

FLOWING LED CHAMFER

TRANSPARENT LED WINDOWS

SIDE VISIBILITY

real time feedback

The band of LED lights flashes green or red to give the runner a quick visual indication of whether they are meeting their efficiency goal.





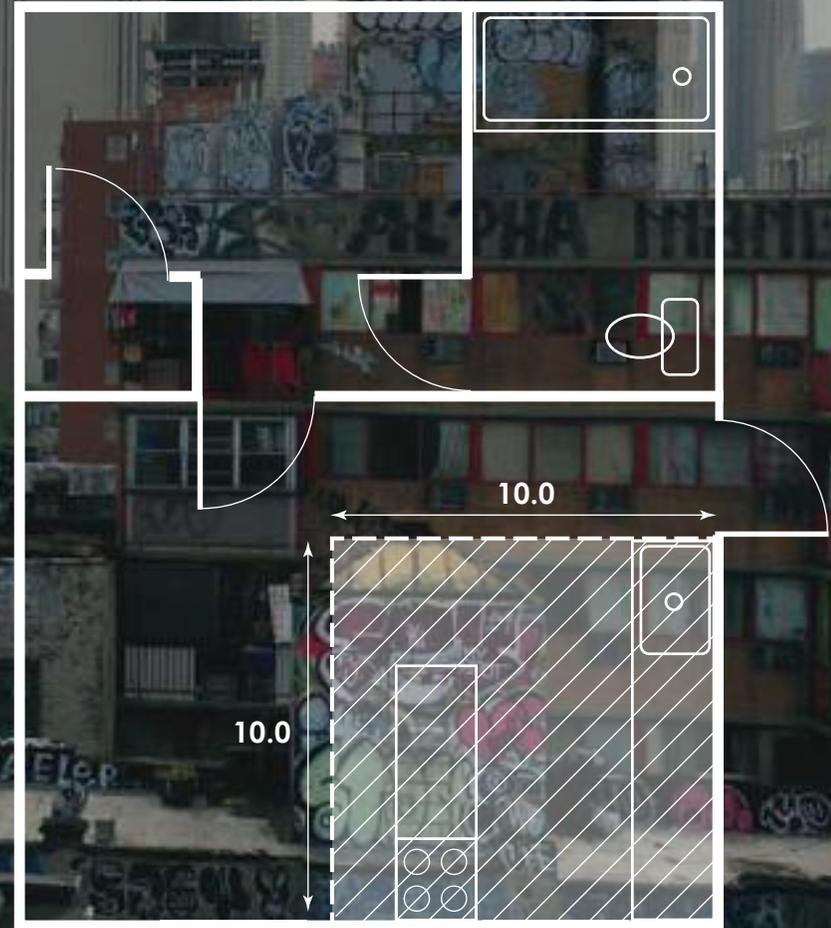


KIERSTAD

kitchen system

Urban kitchens are small

As our population expands and more people move to cities, living space will only get smaller. Kitchens need to be compact, efficient and flexible.



What is the biggest problem with your kitchen?

“Needs more **counter surfaces** within reach. Needs more non-food-prep surfaces for **cat** to **sit** on.”

“I wish there was more **counter space**.”

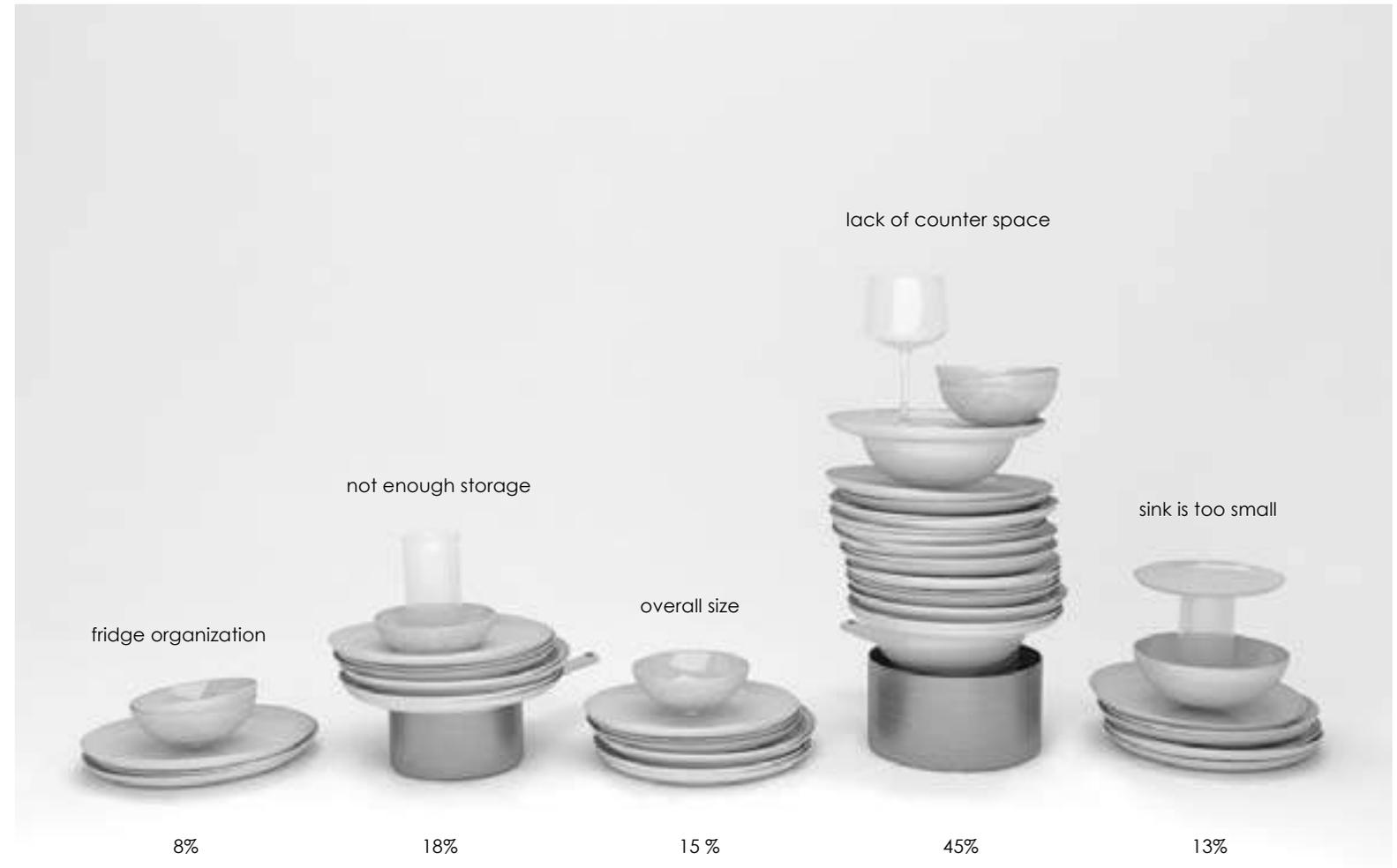
“There’s a lack of **space** around the sink, which can make both food prep and clean up an issue.”



“It is cramped with little **counter space** and what we do have is covered by an appliance.”

“It’s a **small space** with little counter top area.”

Lack of counter space is the most common complaint people have about their kitchen.



What is the biggest problem with your current kitchen?

form and materials



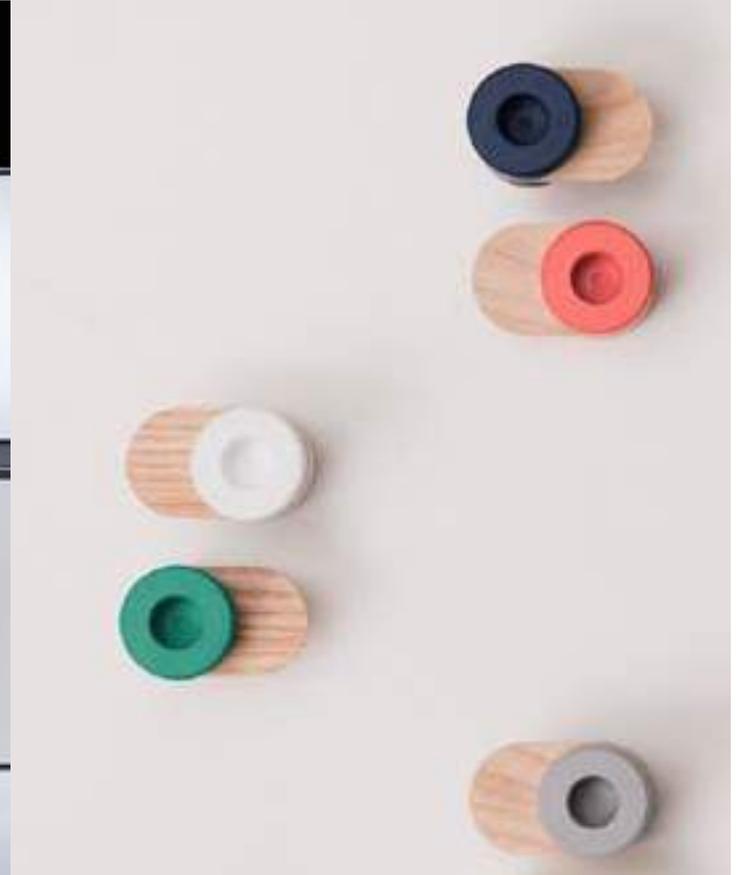
industrial structure

Exposed structural elements communicate sense of quality and strength



subtle surfacing

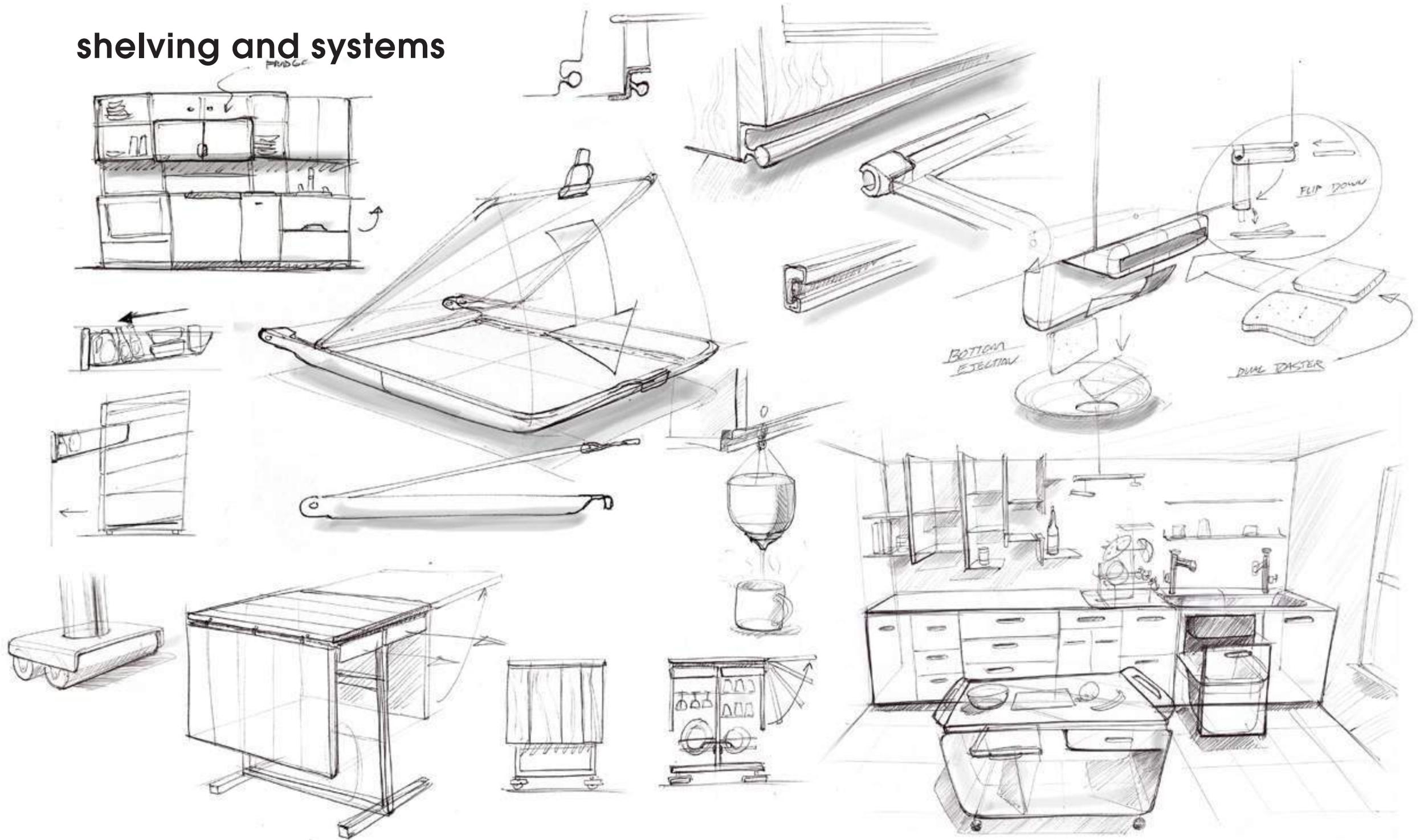
Precise but emotional curvature invites use while conveying durability



honest materiality

Wood and bright pop colors add warmth to the room

shelving and systems



details and appliances





space efficiencies

above counter fridge

elevated recipe holder

dish rack hangs on rod when not in use

built-in cutting board and compost bin

over-sink drain storage

flip-up counter panels

rolling taboret



modular cabinet system



tablet case

Serves as a digital recipe stand. Keeps tablets and smartphones off the counter and protected from food smudges.

recipe/grocery app

Generates a grocery list from your recipes.

above-counter refrigerator

Frees up a large footprint of space and allows for clear food visibility.

modular shelves

The shelving system is built on a flexible grid that can be modified for individual homes.

utensil hanging rod

digital recipe stand

steel support poles



horizontal fridge architecture

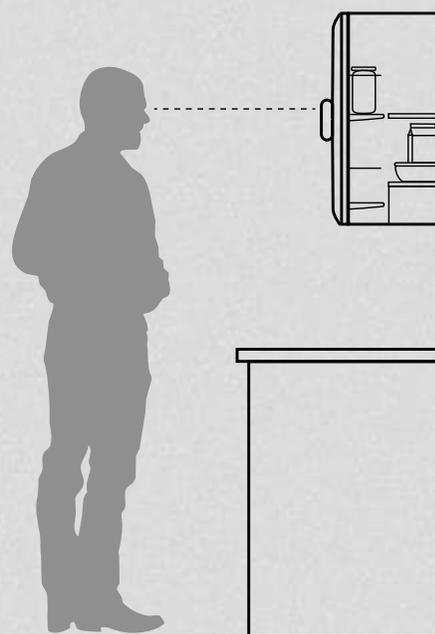


zero footprint

Moving the fridge to the cabinet area frees up 9 square feet of counter space.

clear visibility

The fridge is positioned at eye height, and because it is wide instead of deep, groceries won't be piled in front of one another.





convenient compost

The compost and trash bins have top access doors adjacent to the cutting board for convenient waste disposal.

Flip-out counter

The door to the waste bins can be used as extra counter space when open.



narrow dish rack

The drying rack is small because much of the drying space is on the wall behind the sink. When not in use it can be hung on the wall.



ergonomic dining

The bar stools have backrests to allow for the counter to be a more serious dining space in apartments without room for tables.

airport fire truck

*conceptual form
development*



aesthetic concepts

I was inspired by the strong character in the design work of Japanese product designer Naoto Fukasawa and the dynamic graphics and cuts of New York fashion designers Proenza Schouler.



solid form

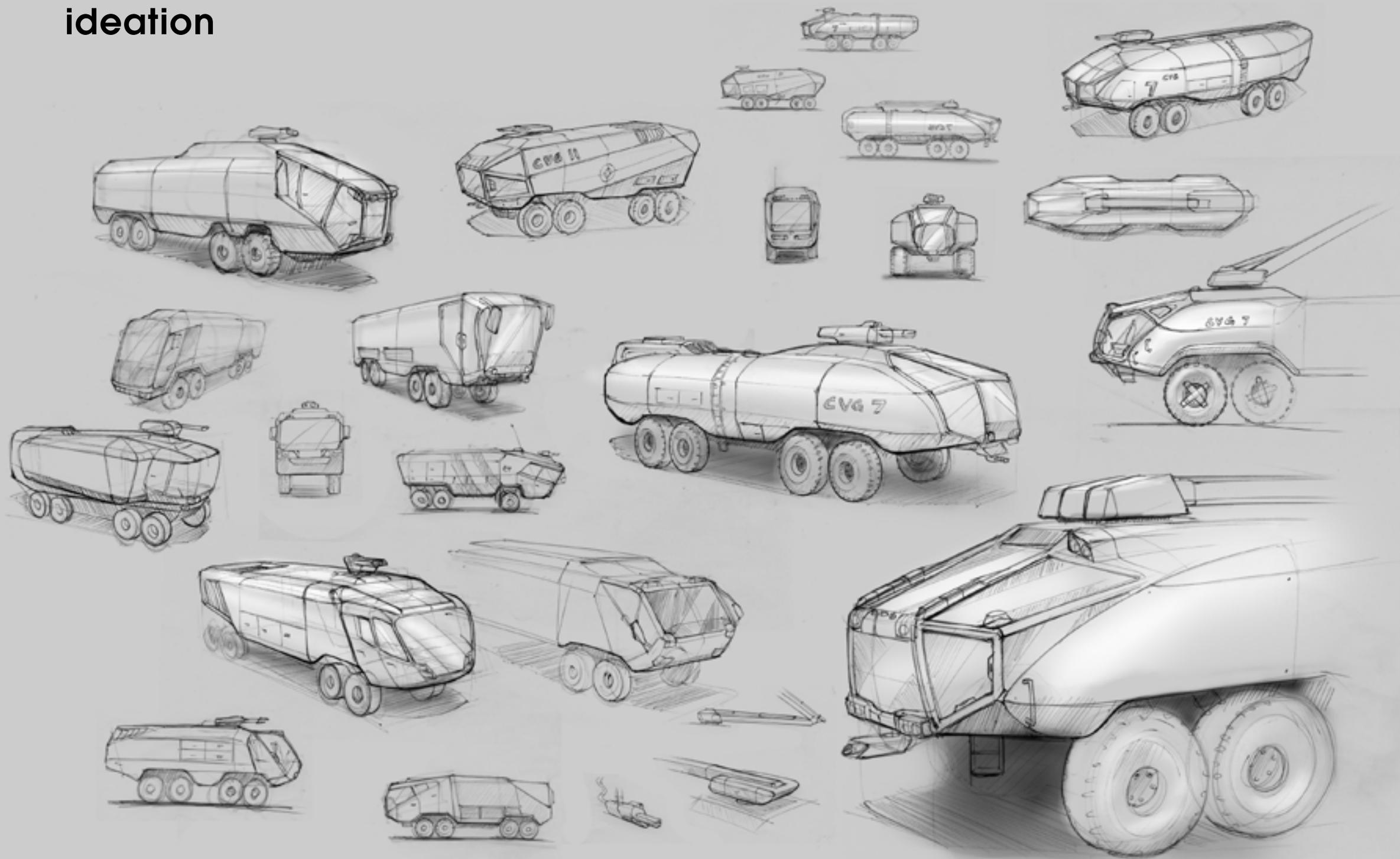


dynamic balance

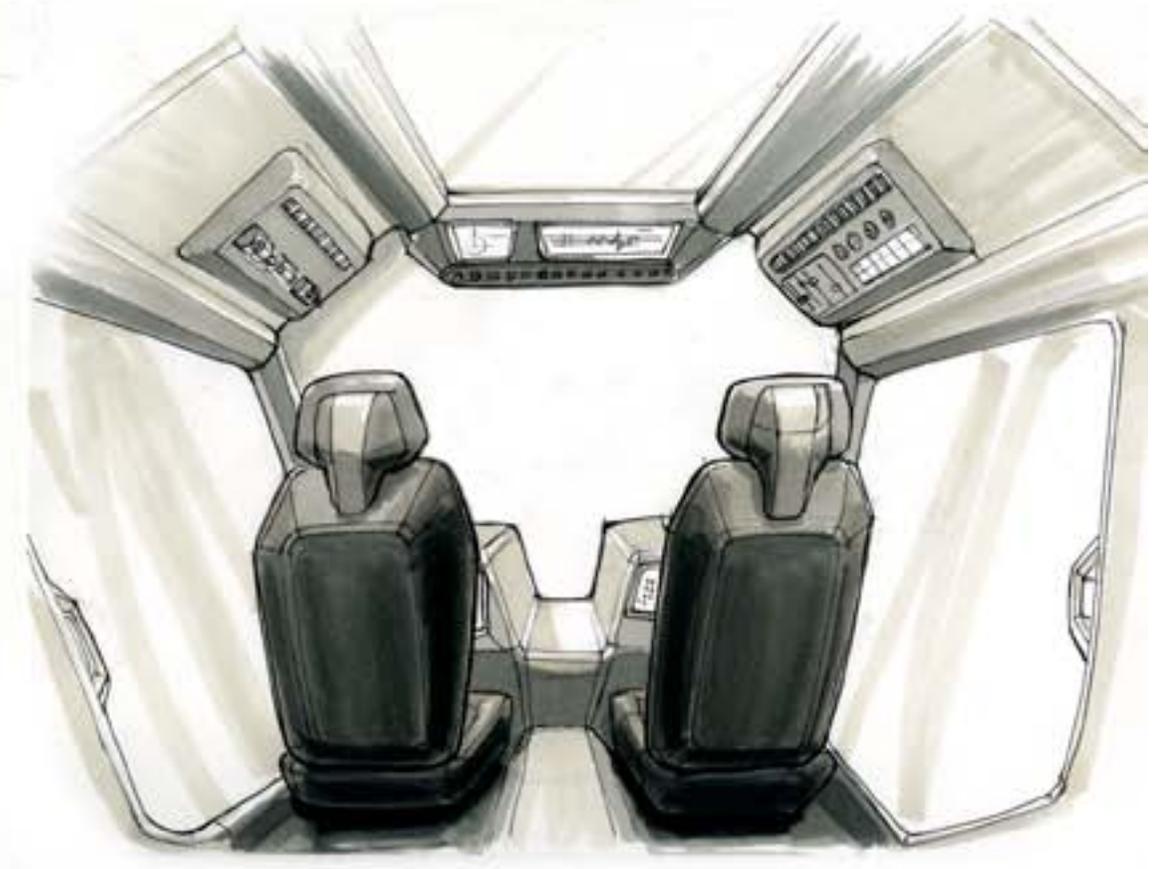
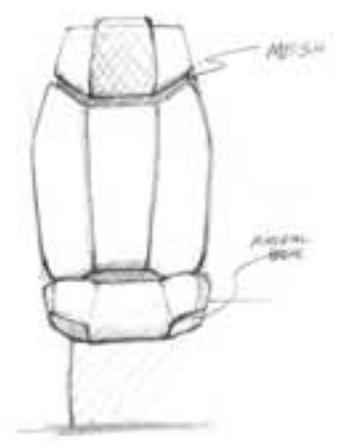
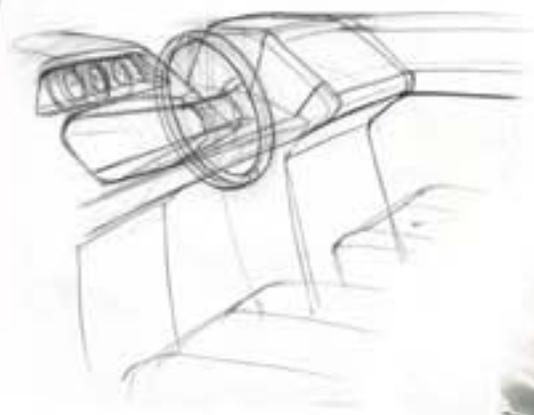
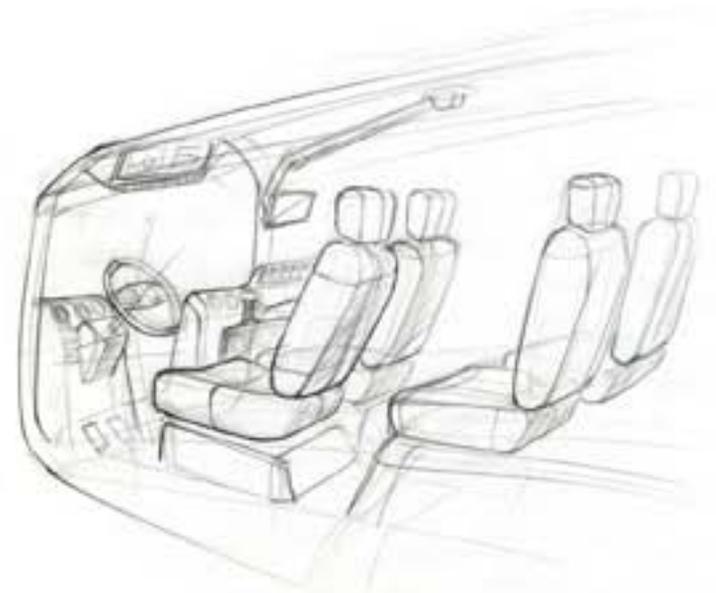
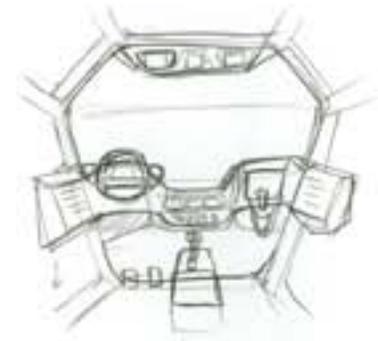
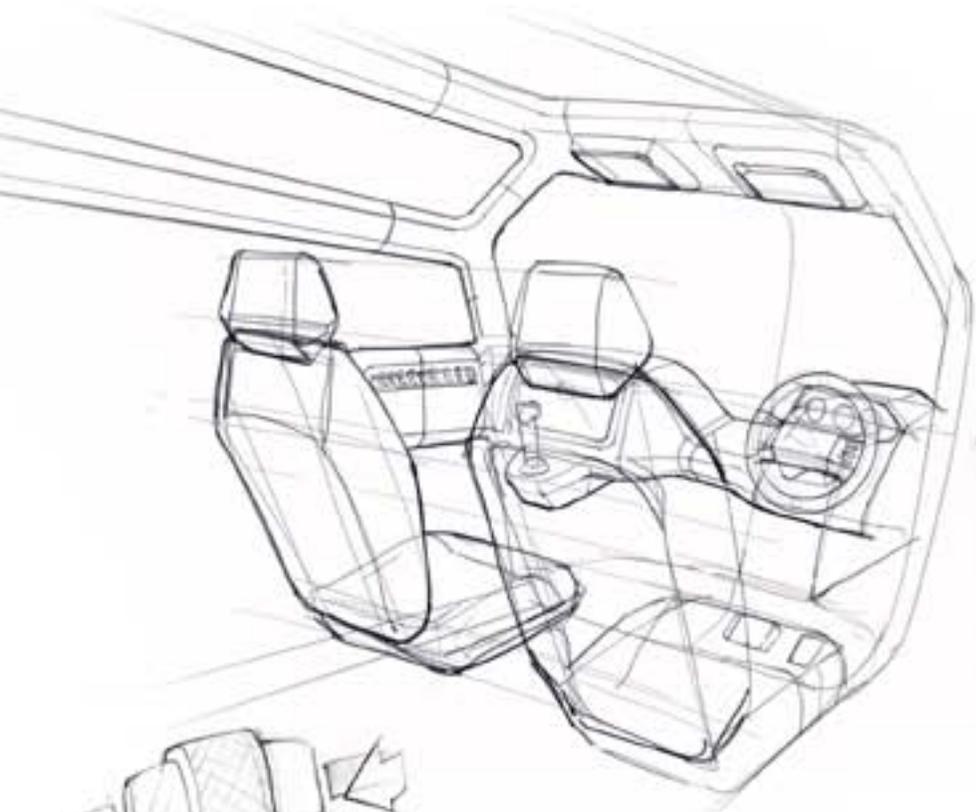


friendly character

ideation



interior design







inspire everyday cycling

*designing the
ultimate urban
utility bike*



Oregon Manifest

the bike design project

Client:

While interning at Industry in Portland, Oregon, I had the opportunity to assist with the brand direction and ideation design phases of Industry's submission for the Oregon Manifest design contest.

www.oregonmanifest.com

Brief:

- Design the ultimate urban utility bike.

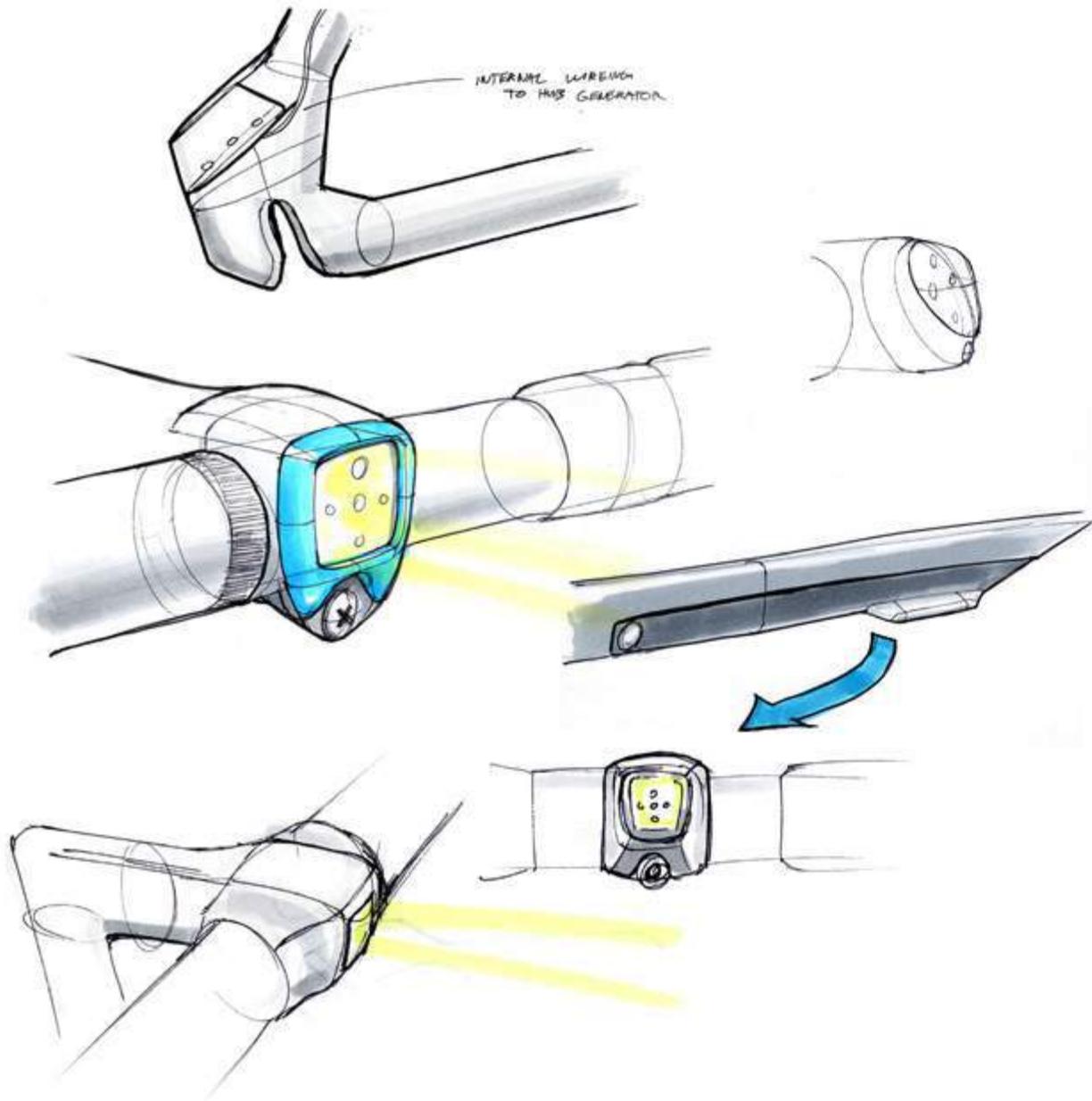
Requirements:

- cargo carrying system
- integrated lighting
- integrated locking/anti-theft mechanism
- must be freestanding under load



ideation

lighting

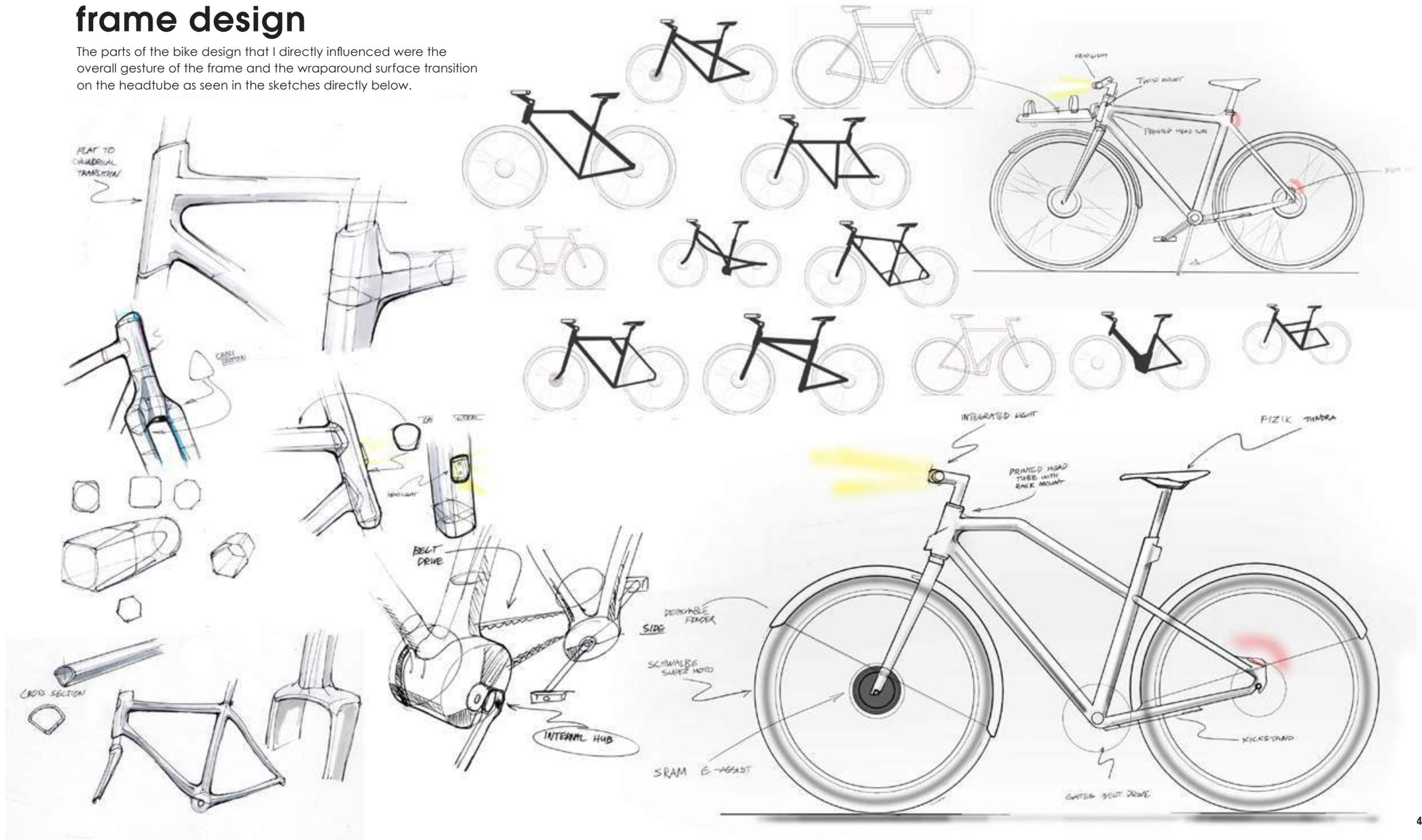


racks and fenders



frame design

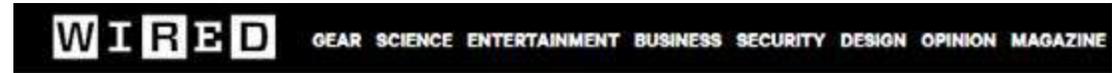
The parts of the bike design that I directly influenced were the overall gesture of the frame and the wraparound surface transition on the headtube as seen in the sketches directly below.





After my internship ended, the rest of the team completed the CAD surfacing design and fabrication. Parts of the bike were 3-D printed in titanium, and our partner Ti Cycles welded the printed parts together with traditional tube sections. Industry also incorporated a haptic feedback navigation system into the handle bars, allowing users to explore unfamiliar parts of a city without distraction.

The bike was featured in a number of publications, including *Wired* magazine.



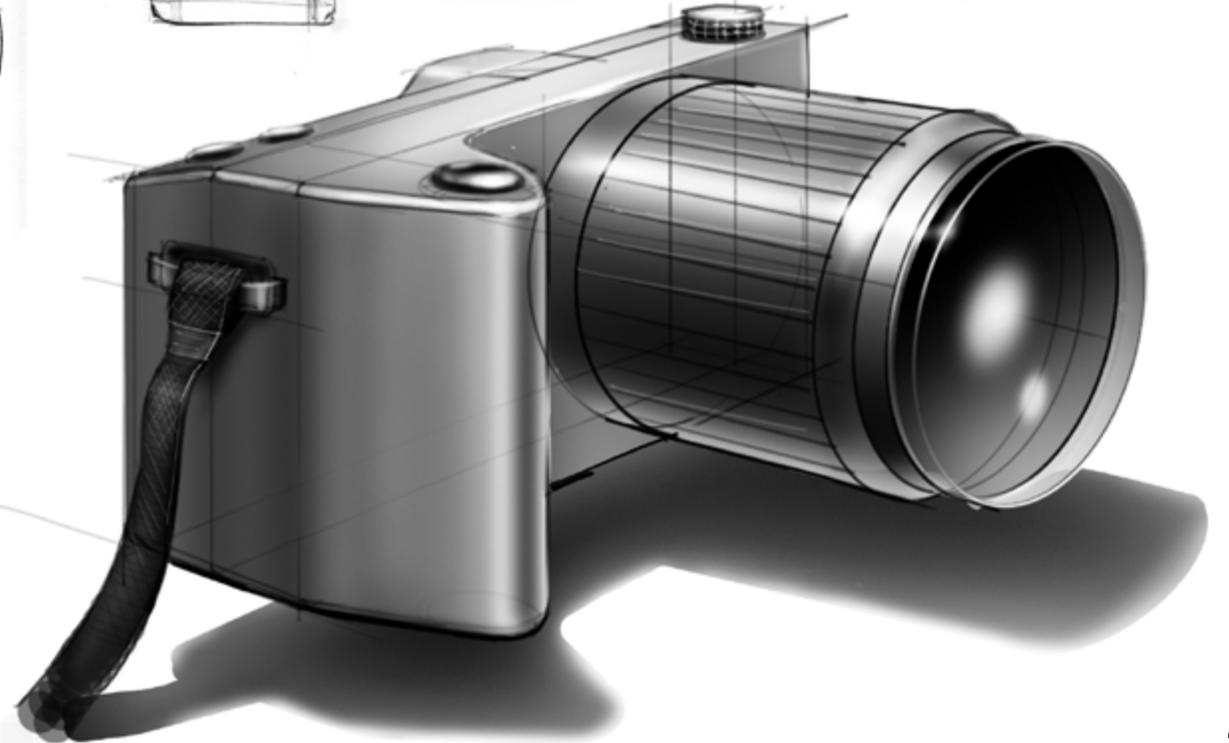
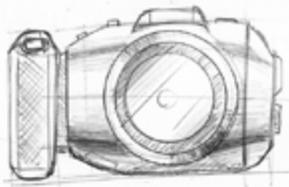
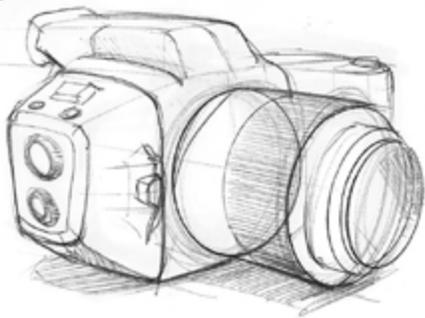
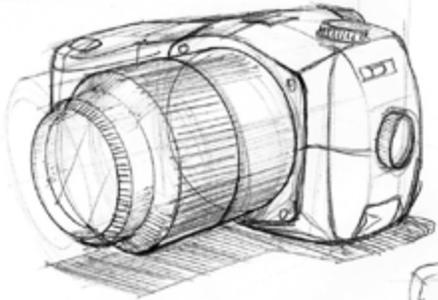
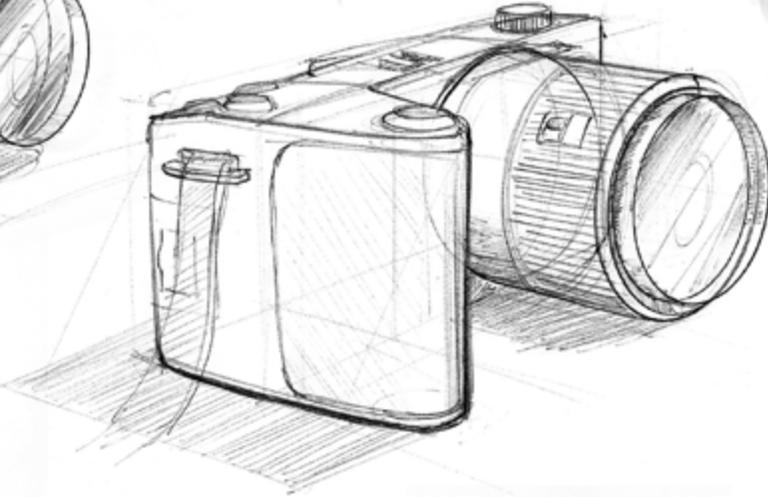
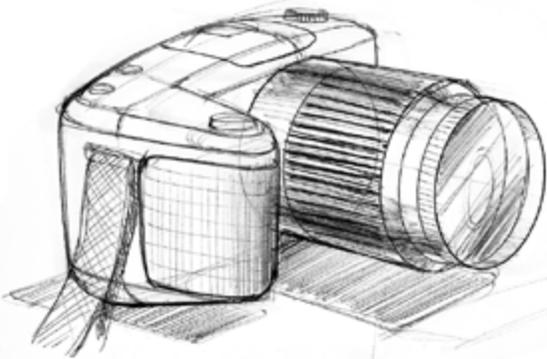
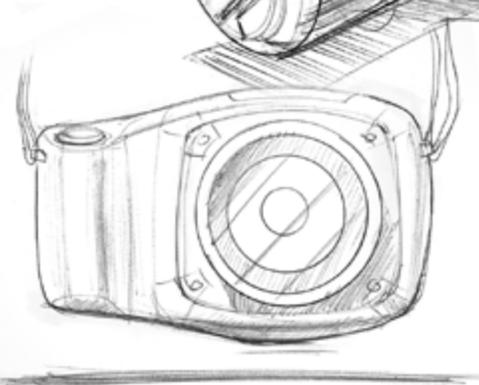
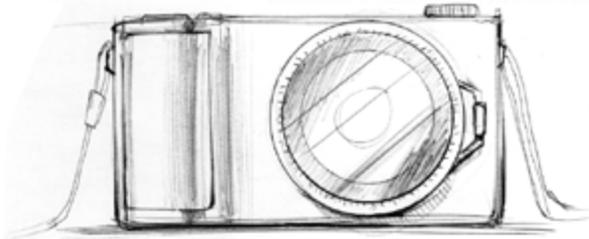
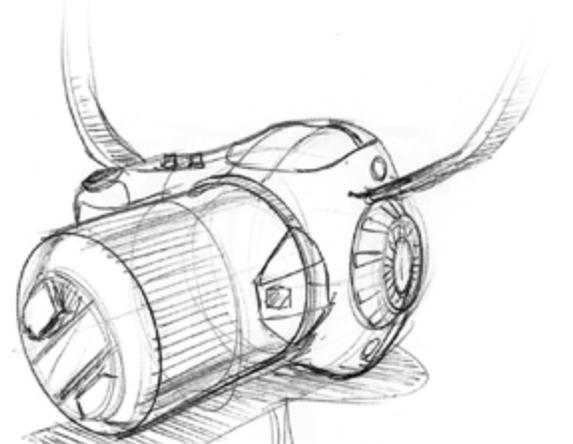
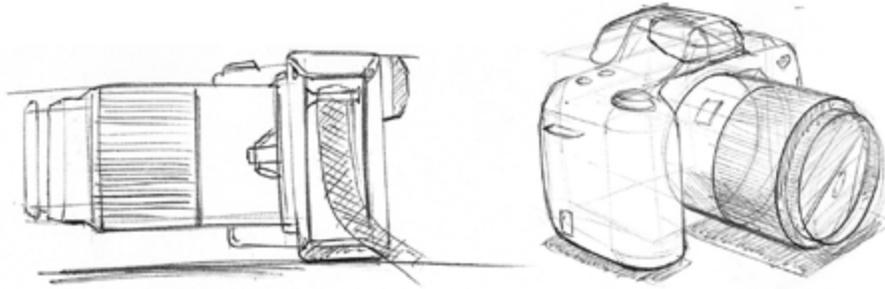
DESIGN | gallery

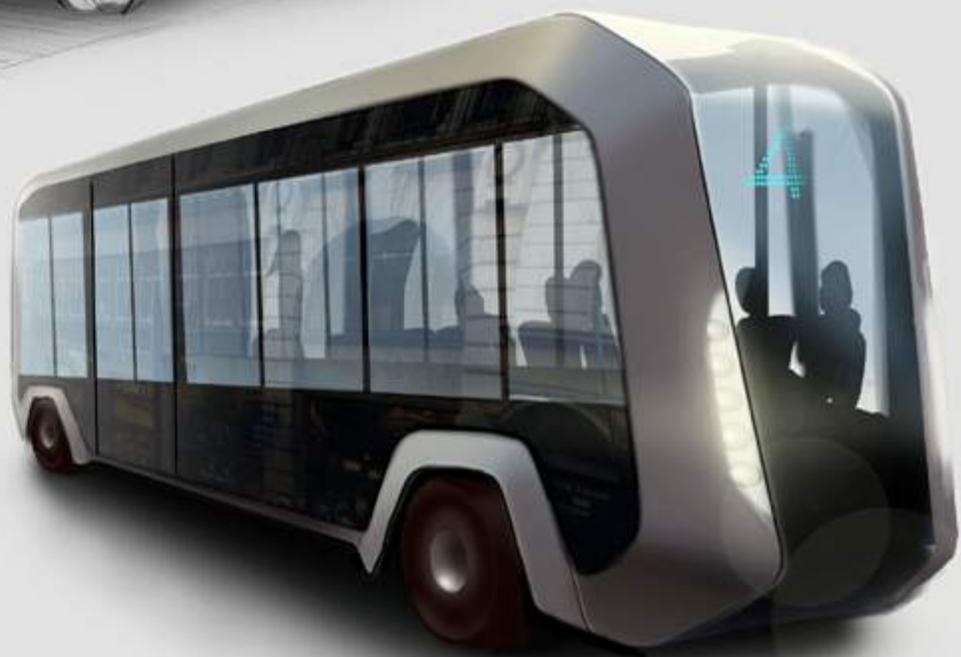
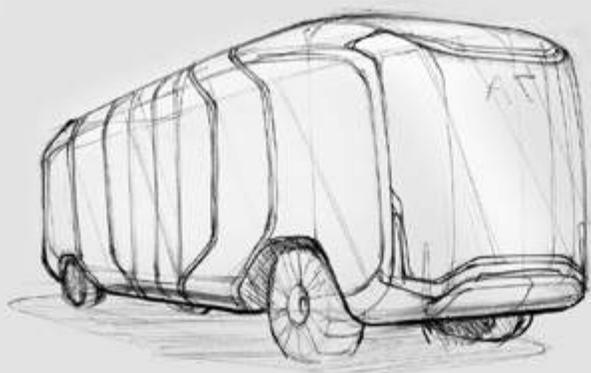
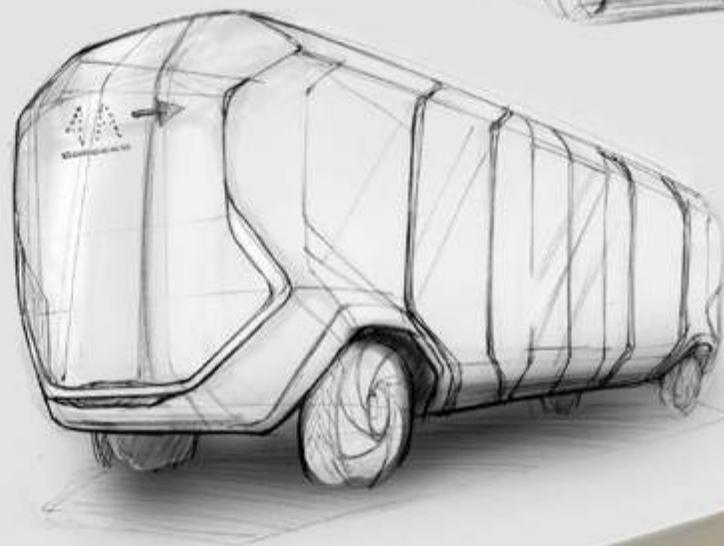
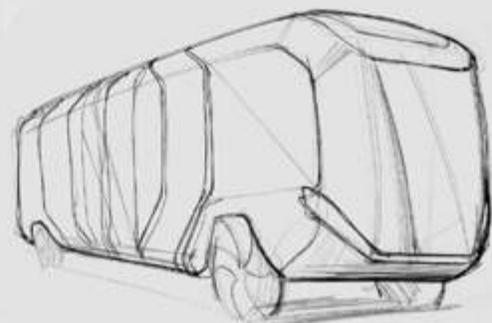
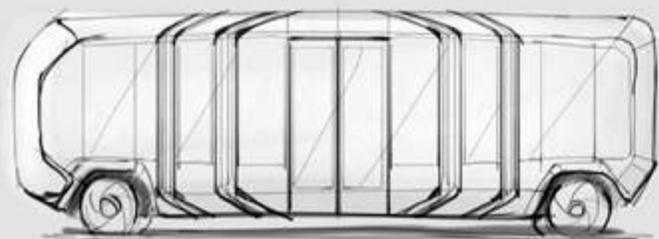
A Slick New Bike With Buzzing Handlebars That Give You Directions

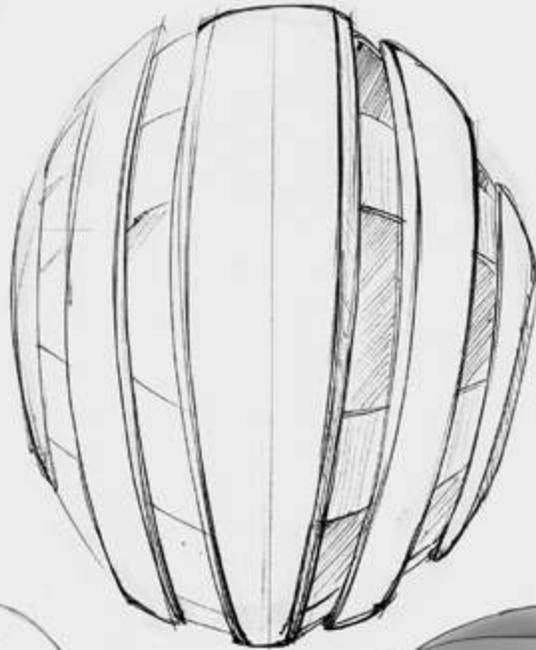
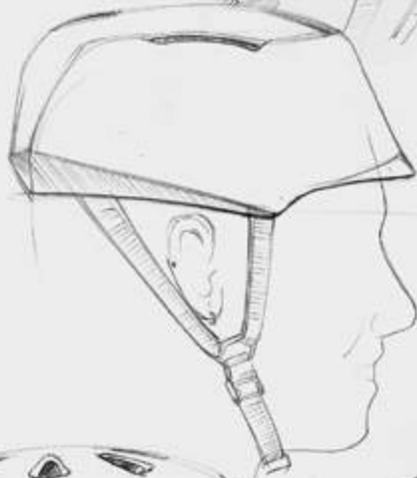
BY LIZ STINSON | 07.28.14 | 6:30 AM | [PERMALINK](#)



sketch projects



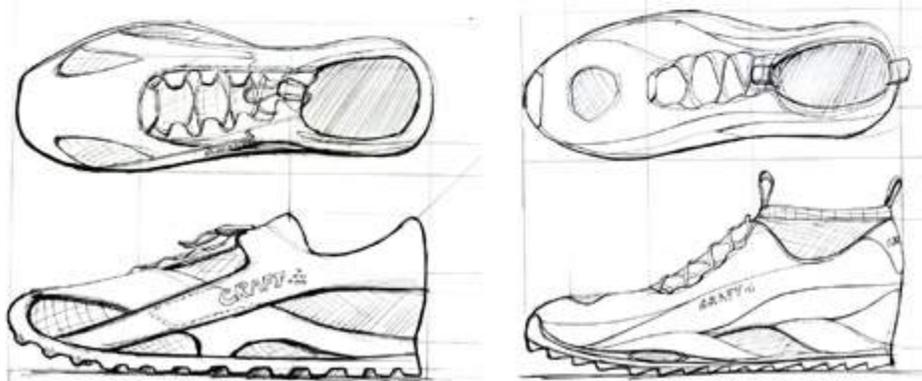
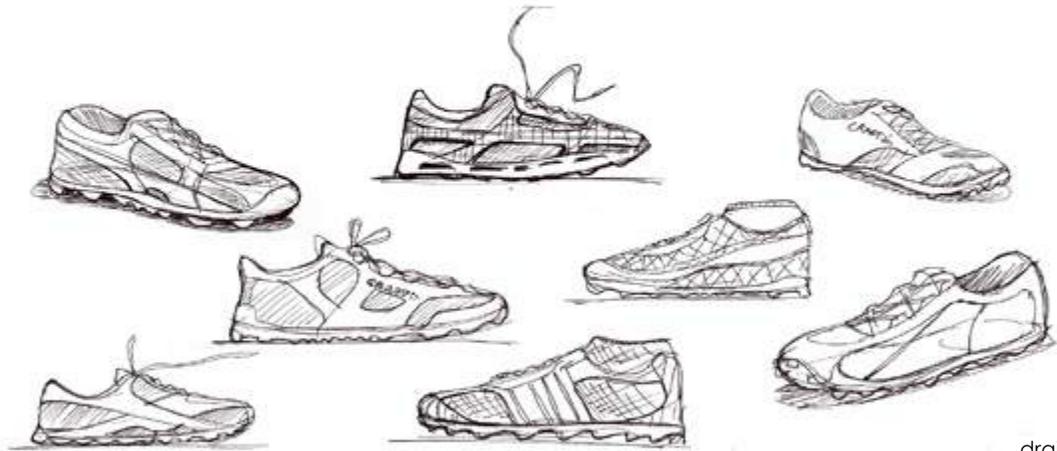
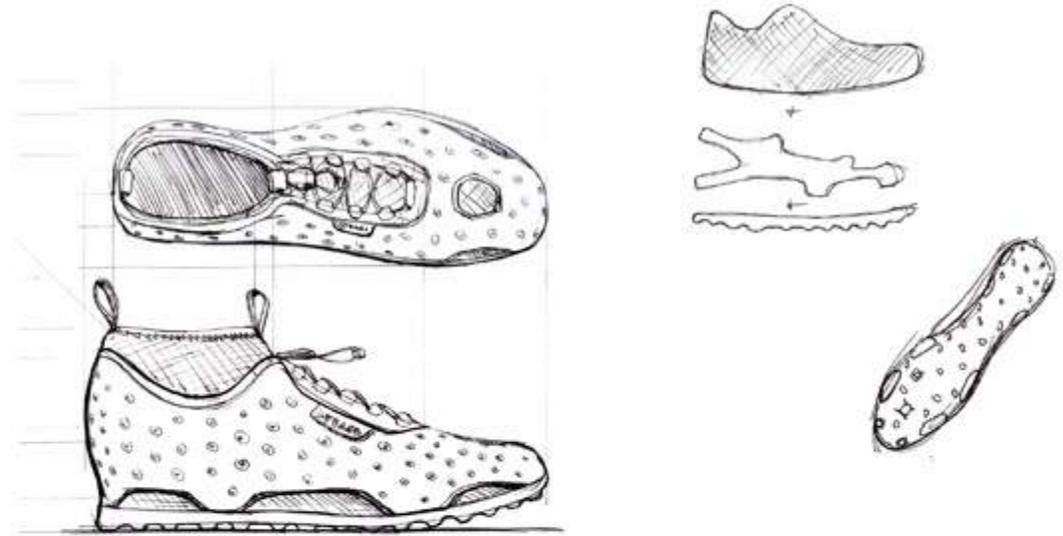








mud running
+
CRAFT ⚡



neoprene liner

silicone upper

drainage holes

john swain

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