# DESIGN / BUILD PORTFOLIO

Ryan Cargo

## Contents



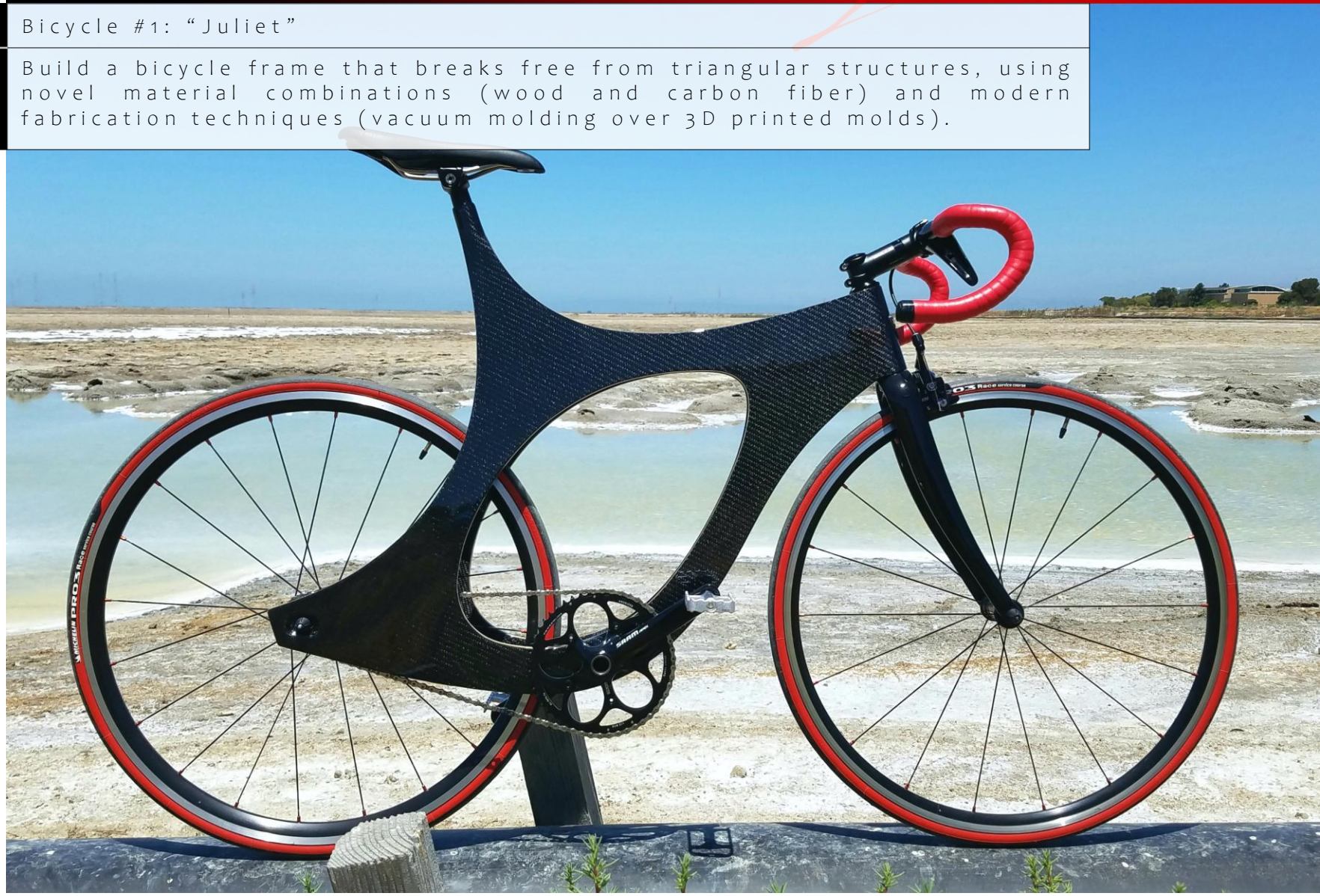
From design through fabrication, all projects in this portfolio are the original works of Ryan Cargo.

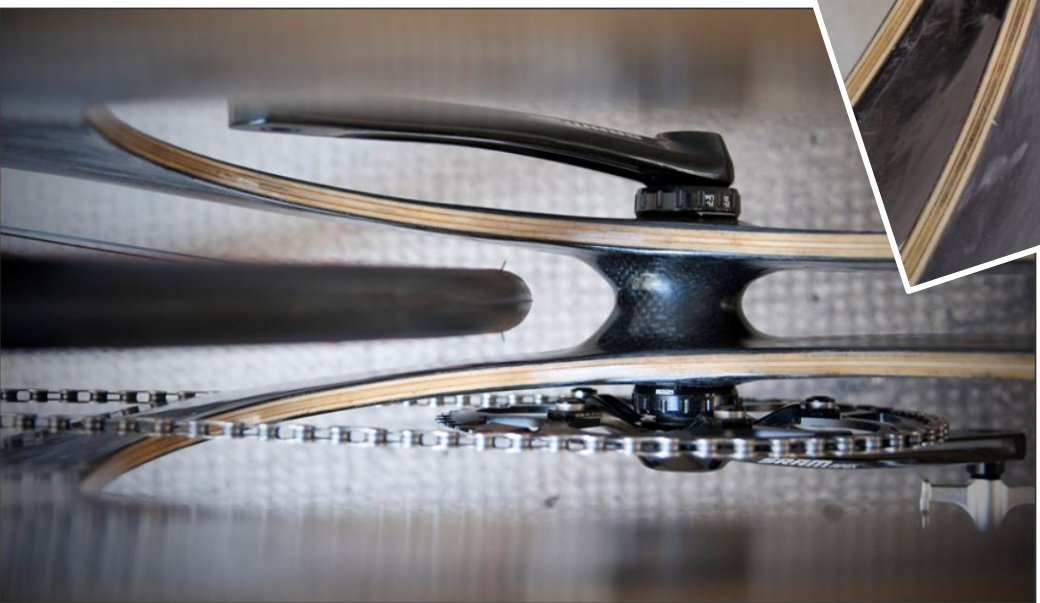
JULIET DESIGNS

www.juliet-designs.com

juliet

| | |
|---|---|
| TITLE: | Bicycle #1: “Juliet” |
| OBJECTIVE: | Build a bicycle frame that breaks free from triangular structures, using novel material combinations (wood and carbon fiber) and modern fabrication techniques (vacuum molding over 3D printed molds). |





(12) **United States Design Patent**
**Cargo**

(10) **Patent No.:** **US D831,543 S**
(45) **Date of Patent:** ** **Oct. 23, 2018**

(54) **BICYCLE FRAME**

(71) Applicant: **Ryan Christopher Cargo**, Foster City, CA (US)

(72) Inventor: **Ryan Christopher Cargo**, Foster City, CA (US)

**) Term: **15 Years**

1) Appl. No.: **29/605,633**

Filed: **May 27, 2017**

**LOC (11) Cl.** ..... **12-11**

**U.S. Cl.**

JSPC ..... **D12/111**

**ield of Classification Search**

SPC ..... D12/111, 117; D21/412, 414, 419, D21/423–428, 431–435

..... B62K 3/00; B62K 3/02; B62K 3/06

pplication file for complete search history.

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* cited by examiner

*Primary Examiner* — Darlington Ly

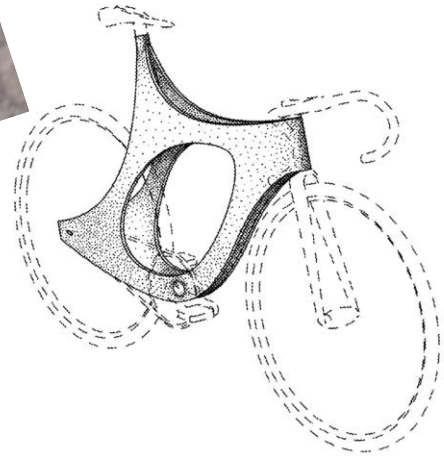
(57) **CLAIM**

The ornamental design for a bicycle frame, as shown and described.

**DESCRIPTION**

FIG. **1** is a front perspective view of a bicycle frame showing my new design;
FIG. **2** is a rear perspective view thereof;
FIG. **3** is a right side elevation view thereof;
FIG. **4** is a front elevation view thereof;
FIG. **5** is a rear elevation view thereof; and,
FIG. **6** is a top plan view thereof.
The broken lines showing various parts of a bicycle are provided for the purpose of illustrating environmental structure and do not form part of the claimed design.

**1 Claim, 4 Drawing Sheets**



JULIET DESIGNS

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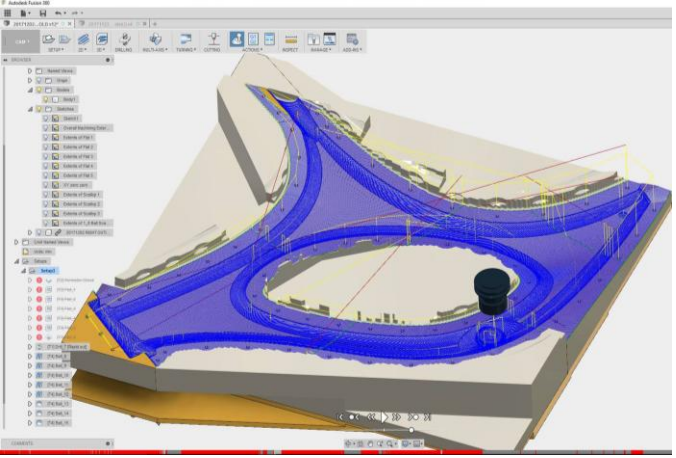
*ella*

| | |
|---|---|
| **TITLE:** | Bicycle #2: “Ella” |
| **OBJECTIVE:** | Evolve the original “Juliet” form into a more beautiful, aerodynamic frame, engineered to interface with modern gravel bike components, built entirely from vacuum-formed carbon fiber over CNC-cut molds. I’ve now put over 2,000 miles on this bicycle. |



JULIET DESIGNS

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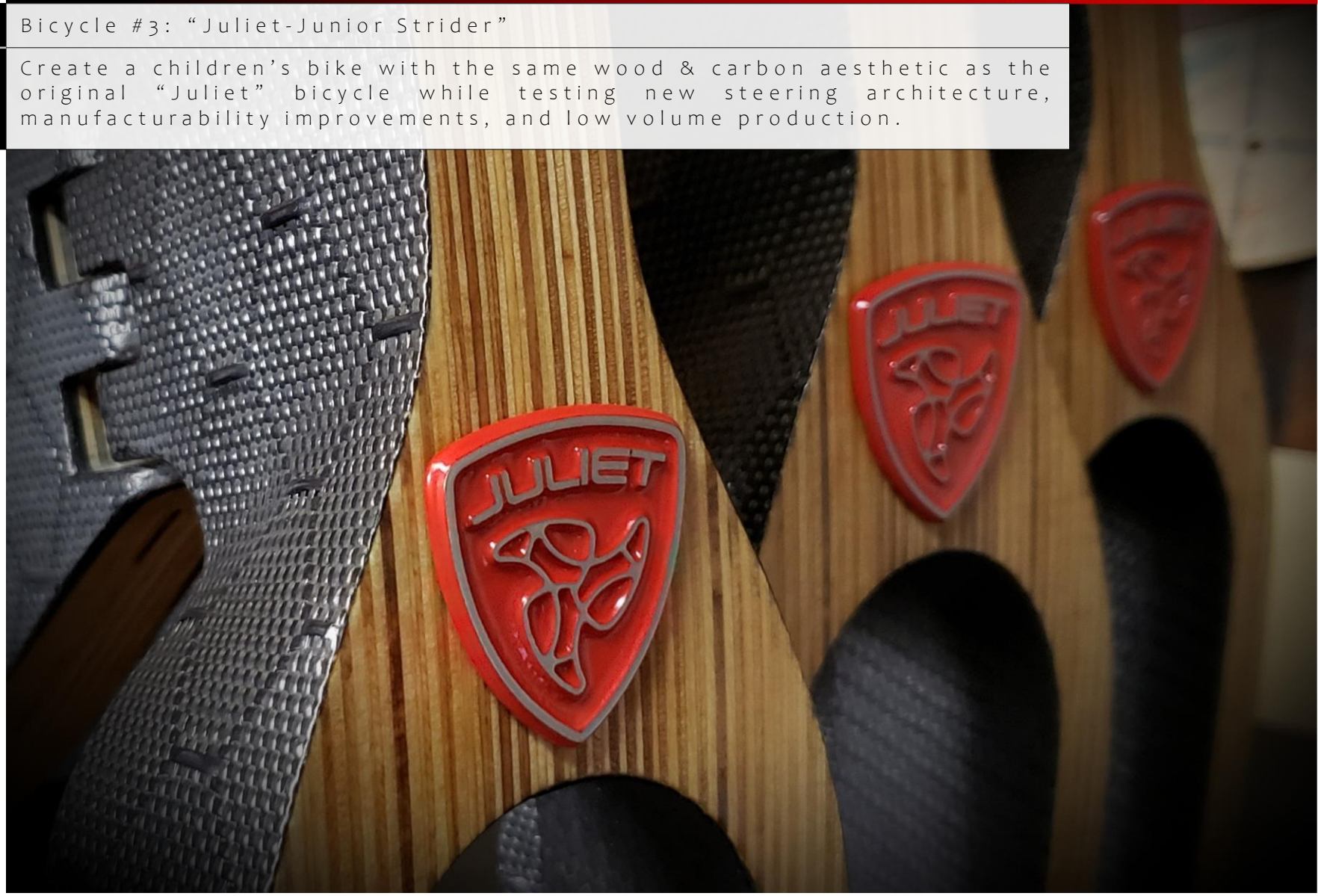
*strider*

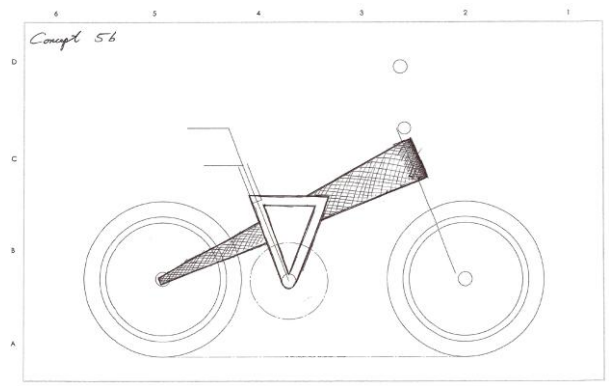
| | |
|---|---|
| **TITLE:** | Bicycle #3: “Juliet-Junior Strider” |
| **OBJECTIVE:** | Create a children’s bike with the same wood & carbon aesthetic as the original “Juliet” bicycle while testing new steering architecture, manufacturability improvements, and low volume production. |

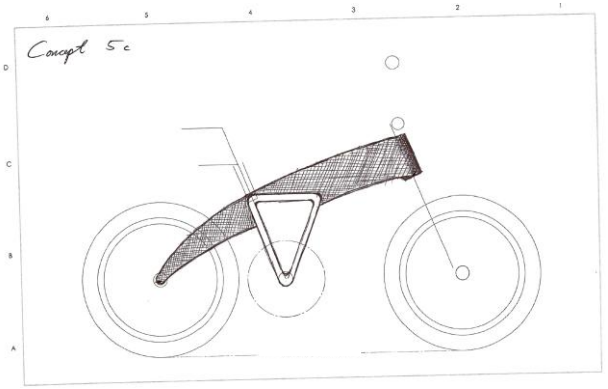


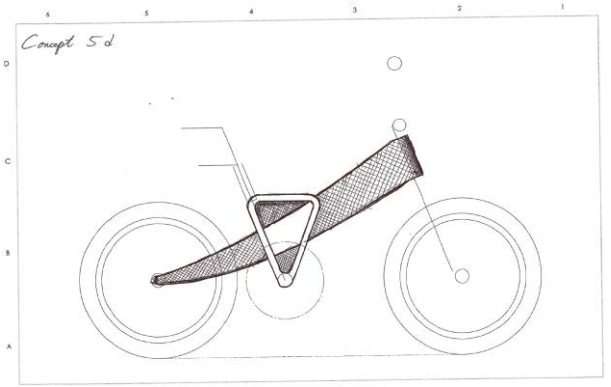

SHAPEOKO

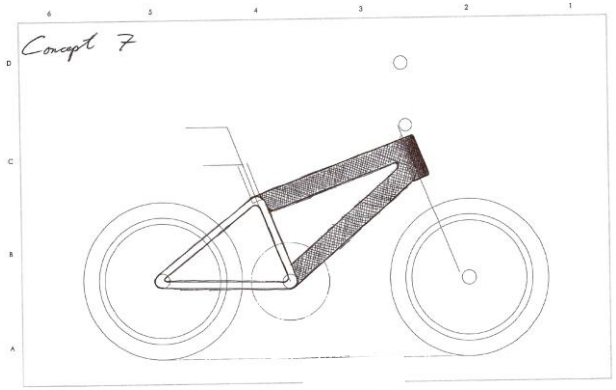

SHAPEOKO

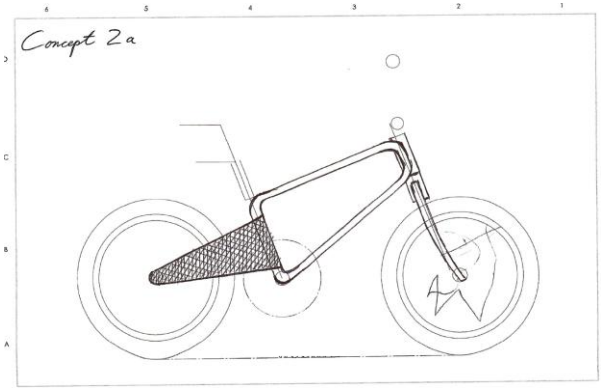
| TITLE: | Children's Bicycle Concepts |
| --- | --- |
| OBJECTIVE: | Ideation phase sketches aligned to known ergonomic / geometric constraints. |

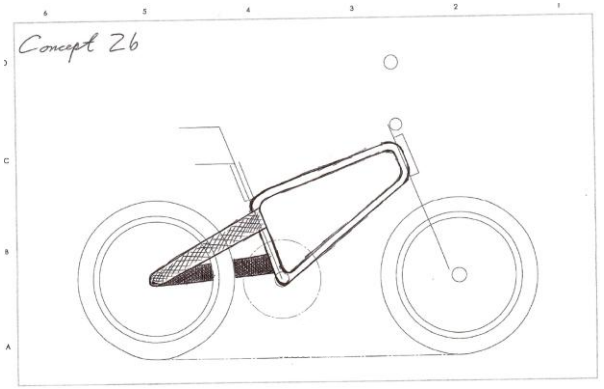


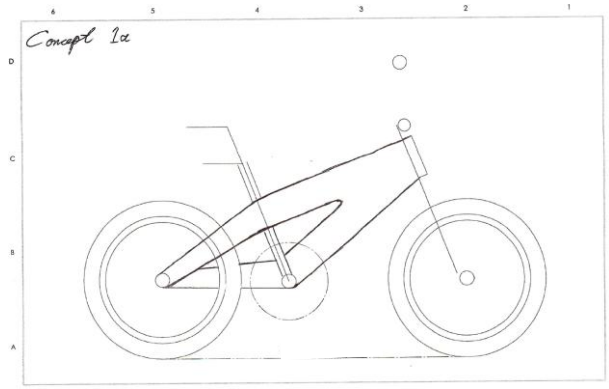



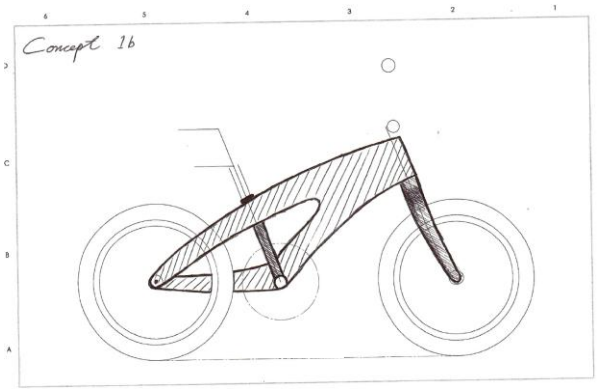



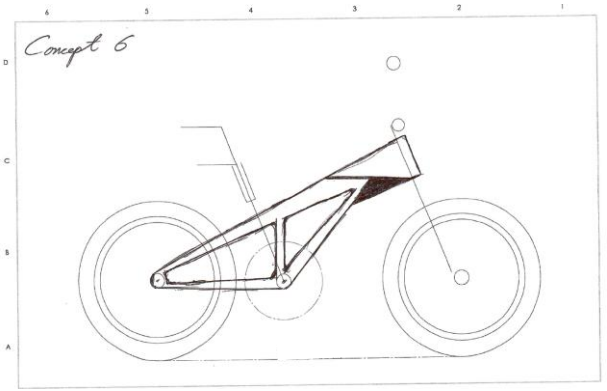



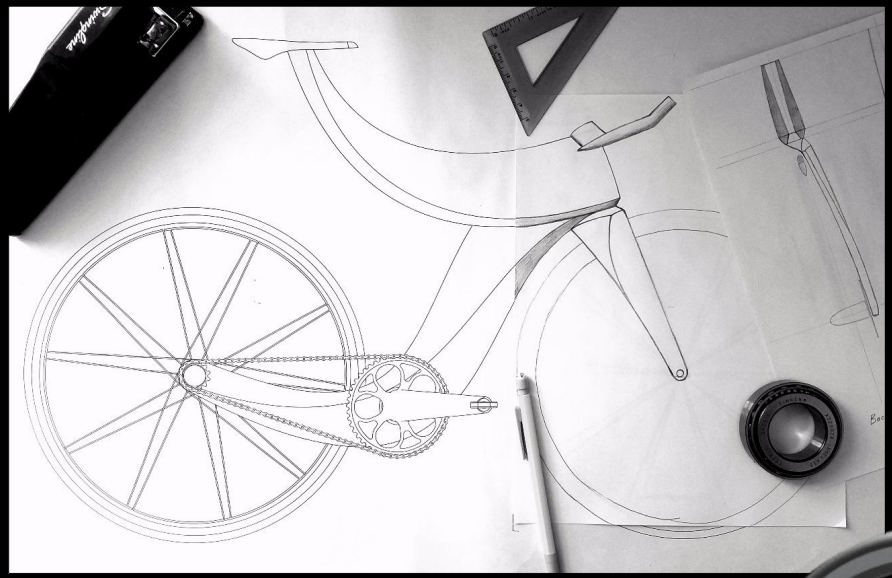



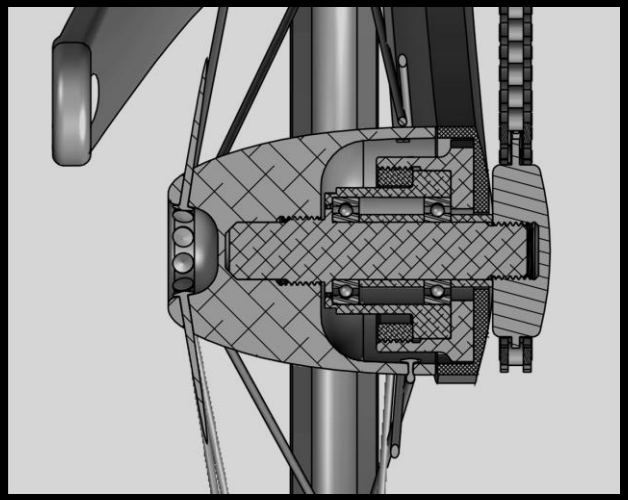







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|---|---|
| **TITLE:** | “Whisper” Bicycle |
| **OBJECTIVE:** | Sculpt a bicycle with one single flowing form, unconstrained by existing component standards or dimensions. |

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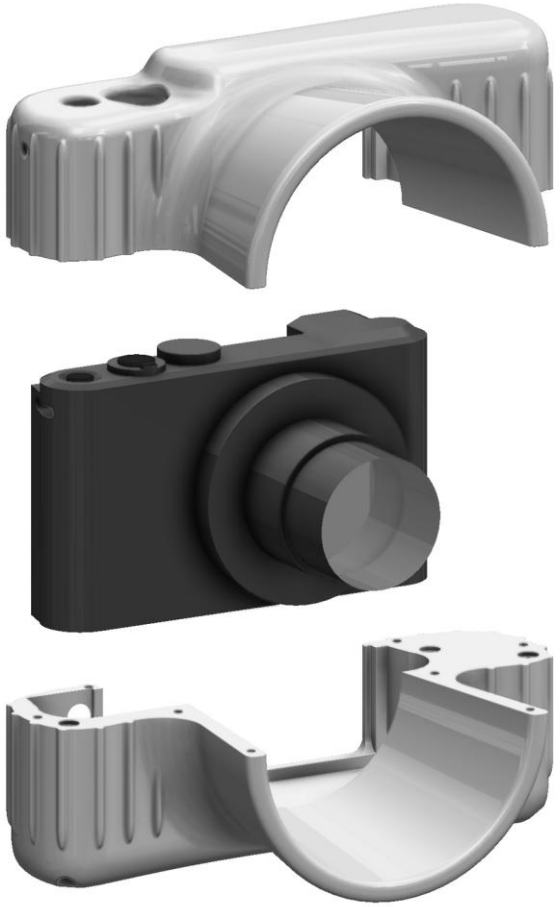
|---|---|
| **TITLE:** | Full Suspension Concepts |
| **OBJECTIVE:** | Explore aesthetic and structural possibilities of flexure and rotary-hydraulic-damper based frames – a continuation of the “departure from triangles” design ethos. |

| | |
|---|---|
| **TITLE:** | Children's Camera |
| **OBJECTIVE:** | "Wrap" a professional digital camera with a child-friendly, 3D printed shell to improve ergonomics, protect the lens, and limit functions to simply "zoom, shoot and playback" by covering unnecessary buttons. |




| | |
|---|---|
| **TITLE:** | Children's Toys |
| **OBJECTIVE:** | Various CNC machined and traditionally handcrafted wooden toys |

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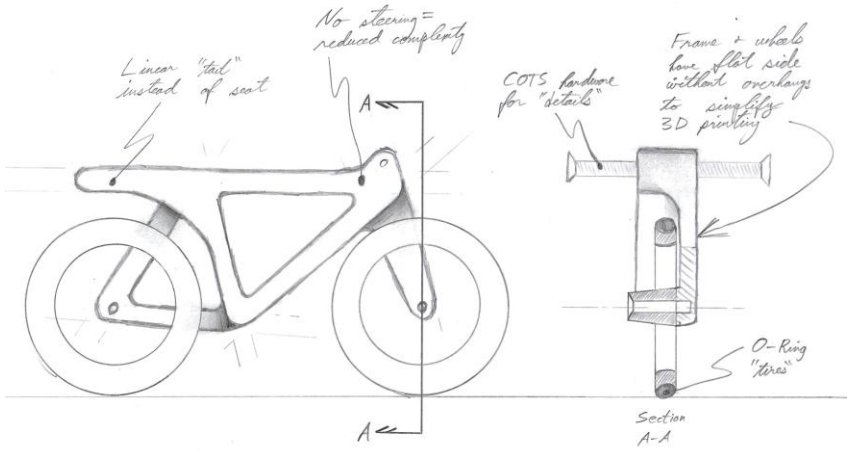
|---|---|
| **TITLE:** | Toy Bicycle |
| **OBJECTIVE:** | Create a fun, durable, and easy to build toy bicycle using basic 3D printing (no support material required) and easily obtainable hardware & O-rings. |

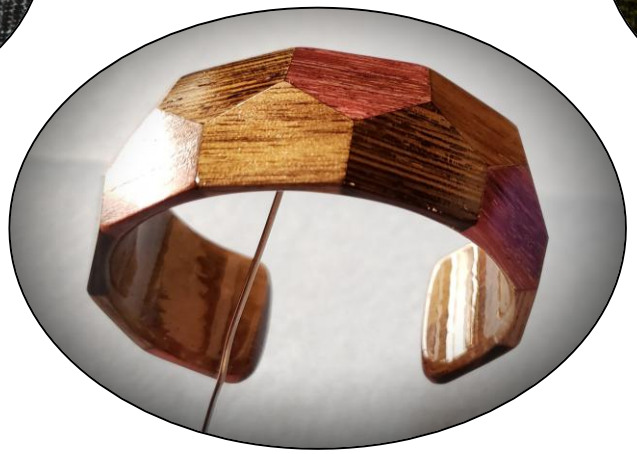

| | |
|---|---|
| **TITLE:** | Jewelry |
| **OBJECTIVE:** | Various one-of-a-kind pieces realized through handwork, CNC machining, 3D printing, and heat-treatment. Made from titanium, silver, bronze, and wood. |

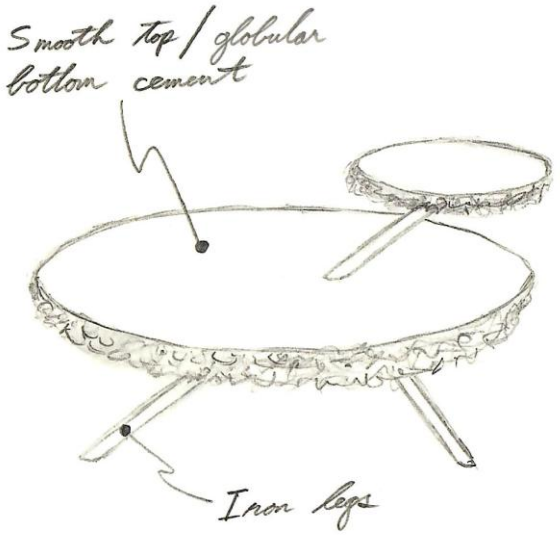











| | |
|---|---|
| **TITLE:** | Sliced Meteor Accent Table |
| **OBJECTIVE:** | Mold a table with a single planar surface such that the remainder of the exterior takes on the material's (cement) own shape and texture. Support with rusted rebar legs to complement the aesthetic of untouched, organic decay. |

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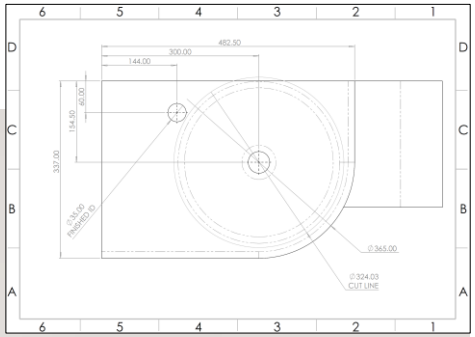
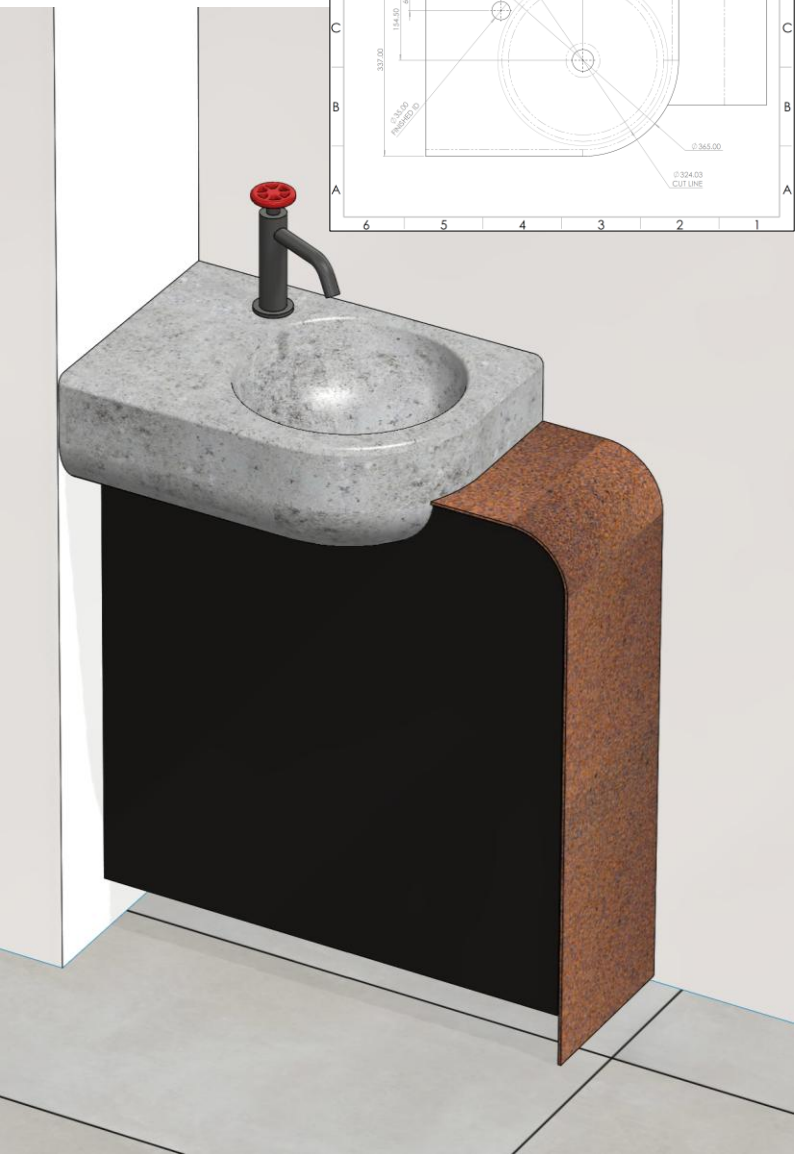
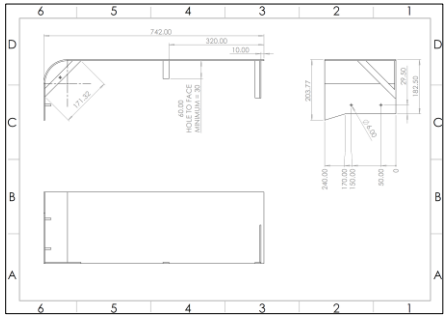
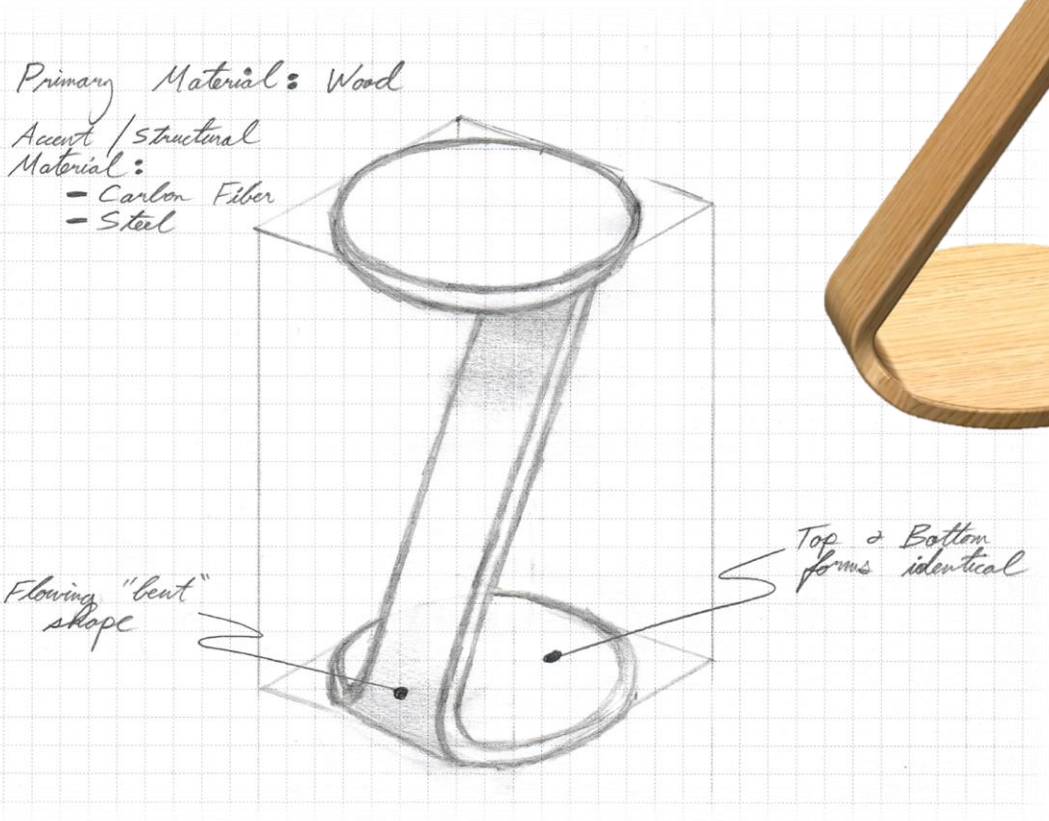
|---|---|
| **TITLE:** | Bathroom Vanity |
| **OBJECTIVE:** | Create a powder room vanity with a brutalist aesthetic pairing raw, geometric concrete with rusted steel. |



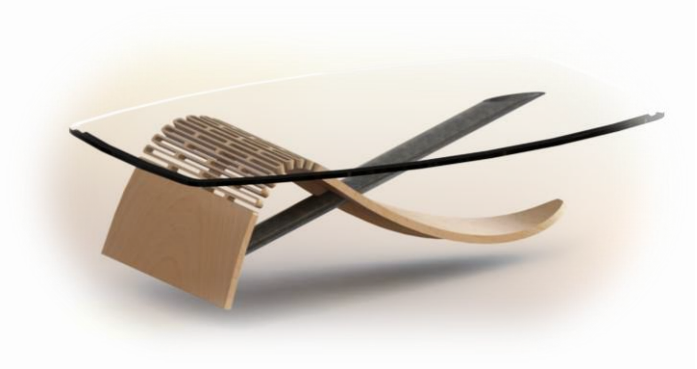



| | |
|---|---|
| **TITLE:** | Breakfast Bar Stools |
| **OBJECTIVE:** | Build graceful, minimalist stool with a wood form inlaid with modern structural elements to contrast brutalist cement breakfast bar architecture. |

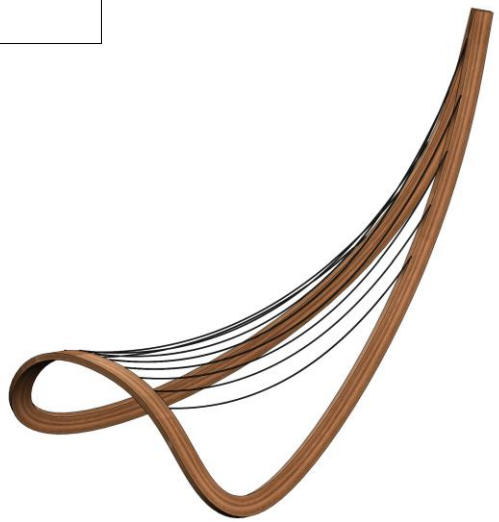


| | |
|---|---|
| **TITLE:** | Furniture Concepts |
| **OBJECTIVE:** | Design studies of various forms & materials. |

wood bench
with steel legs

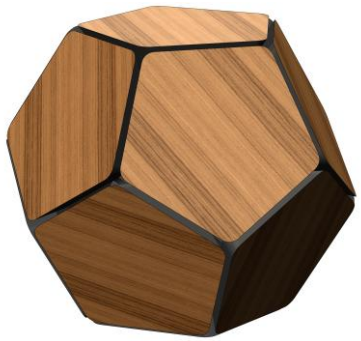


glass coffee table with
kerf-bent wood leg

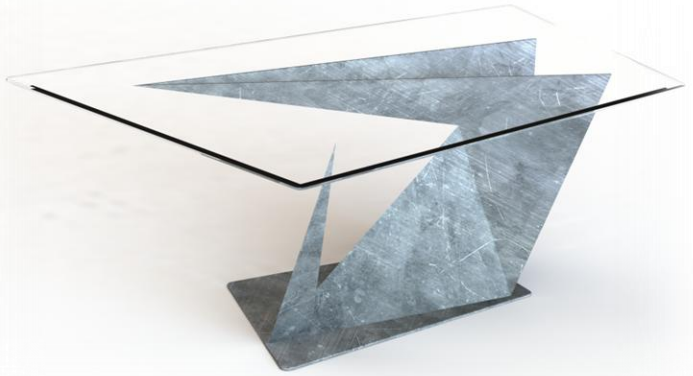


rocking chair with
steam-bent wood & cord

marble table
with steel legs



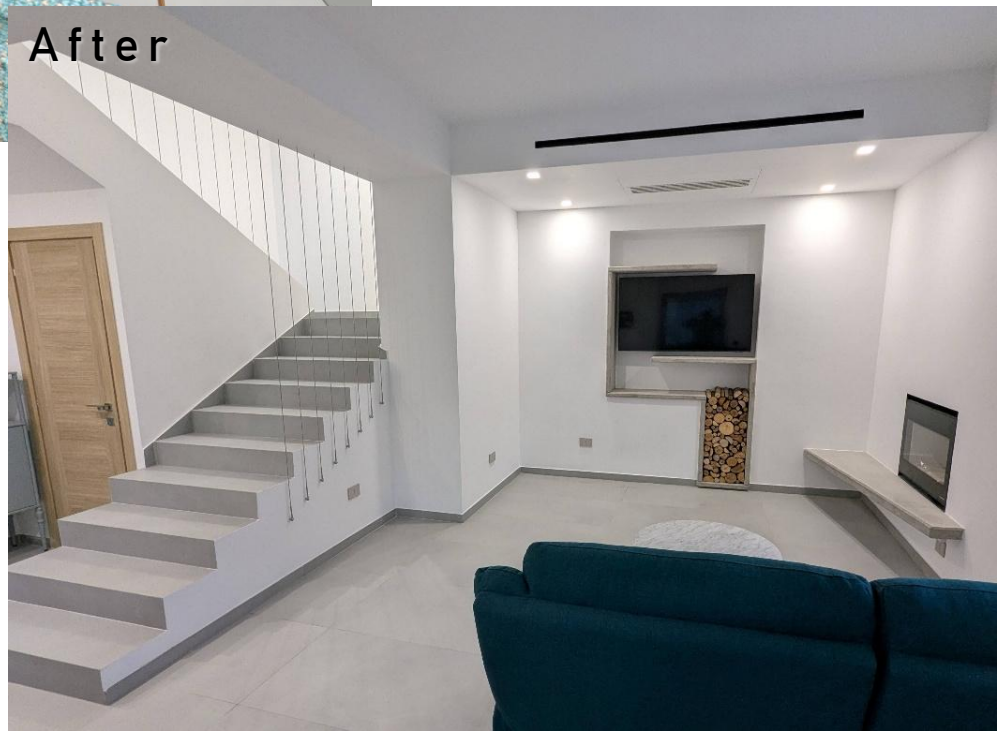
dodecahedron lamp



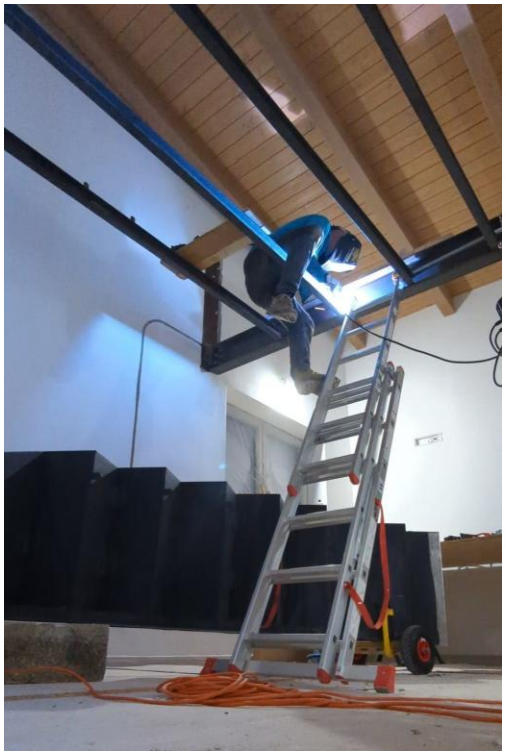
glass table with
faceted steel support

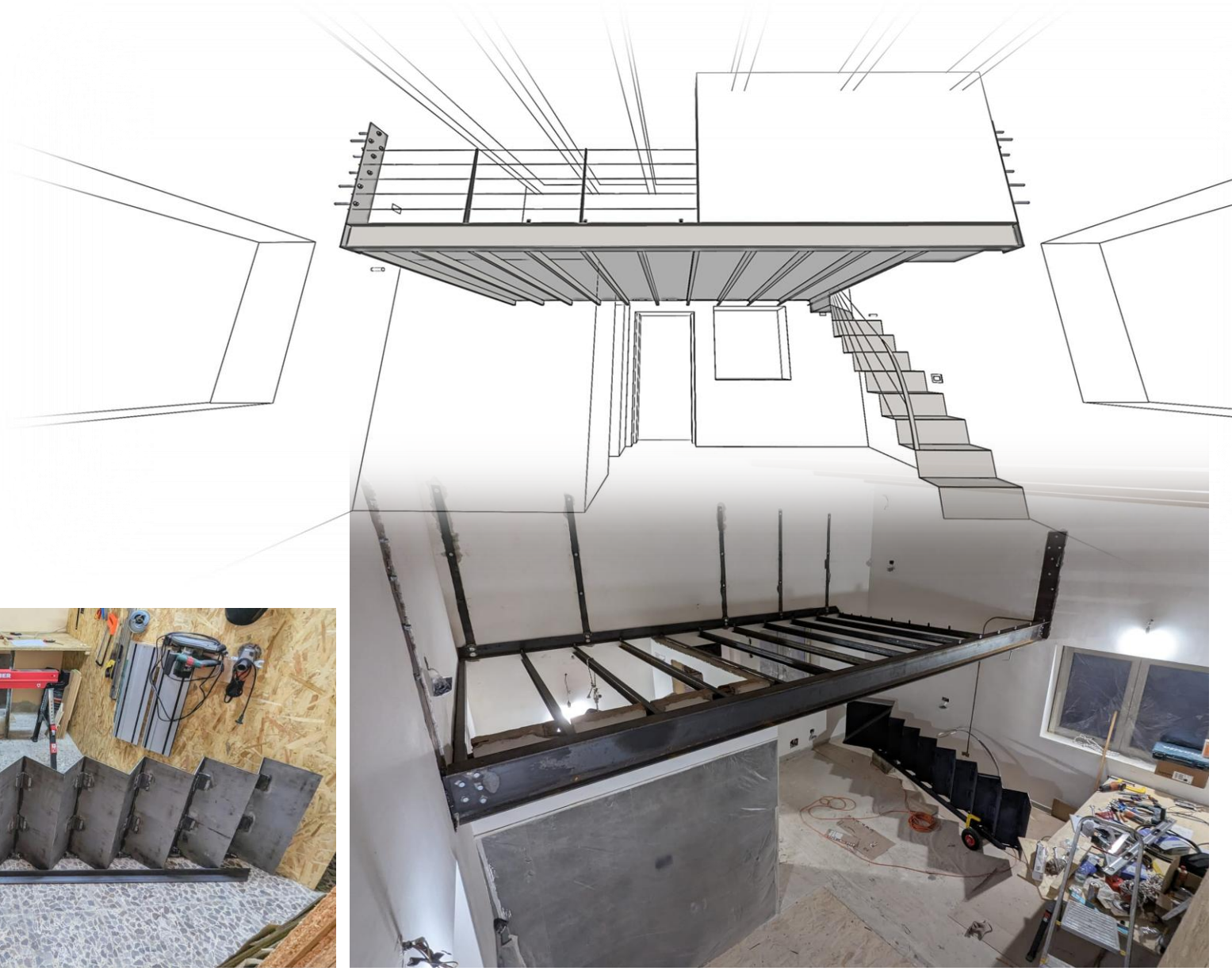
| | |
|---|---|
| **TITLE:** | Living Room Reconstruction |
| **OBJECTIVE:** | Part of an entire house redesign and build project which involved architectural design, replacing a structural wall with steel beams to support a 40,000 pound load, and extensive hand fabricated architectural concrete and tensioned steel cables. |





| | |
|---|---|
| **TITLE:** | Tiny House Sleeping Loft |
| **OBJECTIVE:** | Construct a loft within an existing 300 square foot building. Welded steel structure with minimalist stairs, cable railings, built-in cabinets and sleeping space for three. |






POLIZIA
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