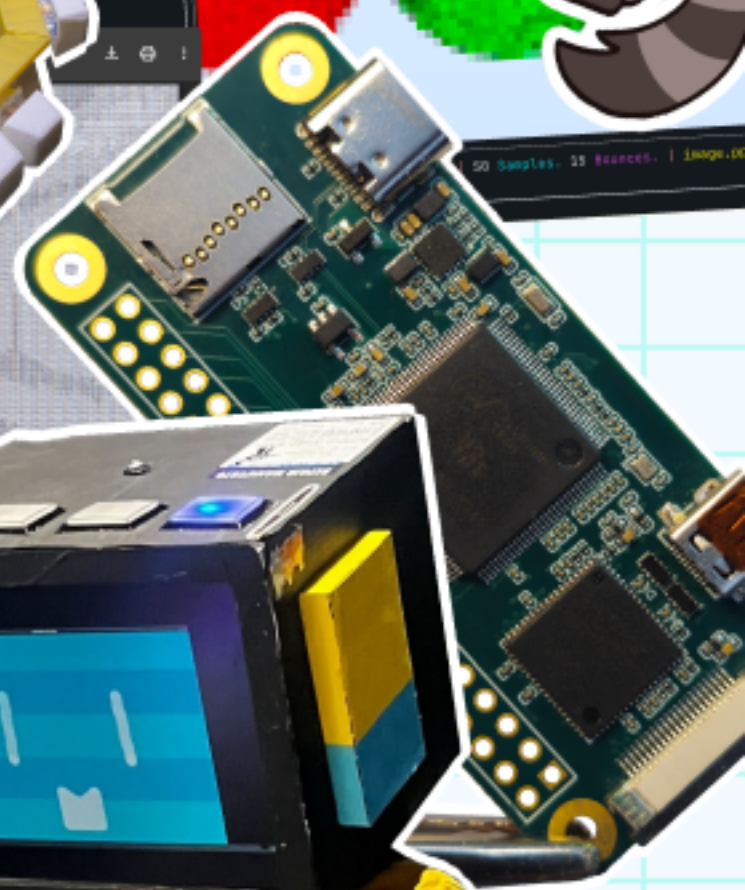
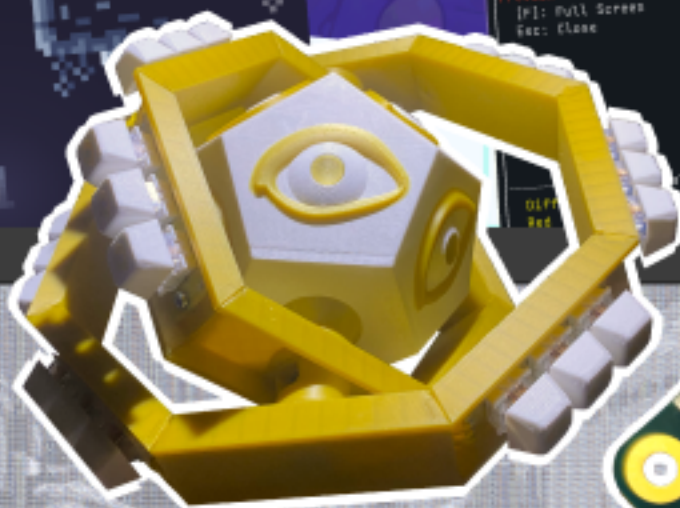




Featuring 150+ projects made by teenagers around the world!

magazine.hackclub.com



PROJECT:

magazine

by hack club



undercity



shiba



daydream dfw



juice

Hack Club is a 501(c)(3) non-profit
dedicated to get teens making awesome
coding + electronics projects

this is the hack club 2025 magazine

HACK CLUB

magazine.hackclub.com

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Hack Club is a place where teenagers come together to learn and make amazing projects. And throughout 2025, that's exactly what they did.

This magazine is a collection of **over 150 of the coolest, most fun, and most technical software and hardware projects** made by Hack Clubbers in just one year. Video games played on real custom-made consoles; balloons sent into space; web browsers created from scratch; a playable version of Doom in a PDF, for some reason; and a whole lot more.

All pages were designed by the creators of each project themselves to show off their unique project to you.

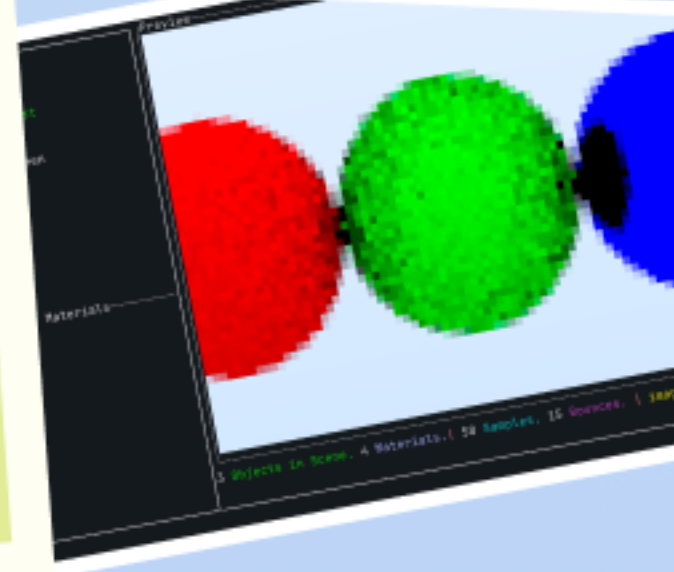
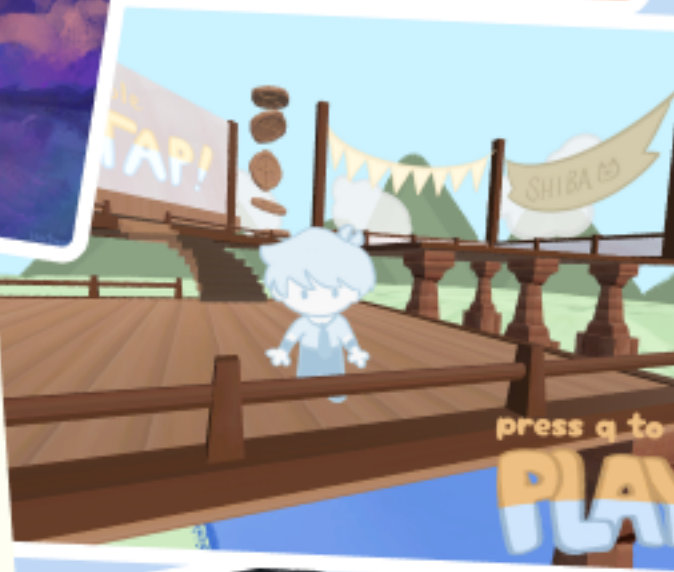
Every page includes a QR code where you can learn more about each project. All projects are open source!

made with <3 by teenagers from all around the world.

YOU SHIP



What is a You Ship We Ship?
A You Ship We Ship (YSWS) is a type of Hack Club program where you ship a project, and we ship you a prize!
For example, in Page, you ship a personal site, and we'll send you a domain to put your site on. Some YSWS also have a physical hackathon to go to at the end! See the photos below :D



What happened in 2025?
Hack Club ran over 50 different YSWS programs!
This magazine highlights over 10 of them.
In 2025, Hack Clubbers...
spent 240,000+ hours making
23,077 shipped projects
from 112 different countries!

WE SHIP

THIS IS THE

HIGHWAY

TO HARDWARE

Design any hardware project. Get a grant to make it real. Open May to July 2025.

HACK CLUB HACK CLUB HACK CLUB



Highway was a hardware grant program that ran from May 14 to July 31, 2025, where any teen could submit a hardware project and get a grant up to \$300 to build it in real life!

842
projects made

16430
hours spent making

46
countries participated

HIGHWAY TO UNDERCITY

earn points by making projects!!
get invited to Undercity at 4 points :D
learn more at highway.hackclub.com!



166 teen makers • 74 total projects • 19 countries • 72 hours of magic • ∞ memories made

4-day Hardware Hackathon

UNDERCITY

July 11-14, 2025 @ GitHub HQ



welcome to undercity!

meet the organizers @ opening ceremony

project demos

final top 10 stage demos!!!

three guilds!
join one :D

led by:
alex (19) + acon (18)

see the full recap at
undercity.hackclub.com!!

Peas are Best Frozen

Crazy Controllers

readGood

GitHub   Hack Club PRESENT...

SUMMER OF MAKING

Build stuff. Get stuff. **Repeat.**

Last summer, Explorpheus Jones and Heidi Croft went on an epic adventure, discovering Hacklantis and ultimately saving it with the help of Hack Clubbers!



Summer of Making: In Numbers

~30,000

signups

\$260k

prizes shipped

60,000

hours of making

4,000

amazing projects shipped

June 16th to September 30th 2025



Featured Projects

Some of the coolest projects from SOM



Revenge

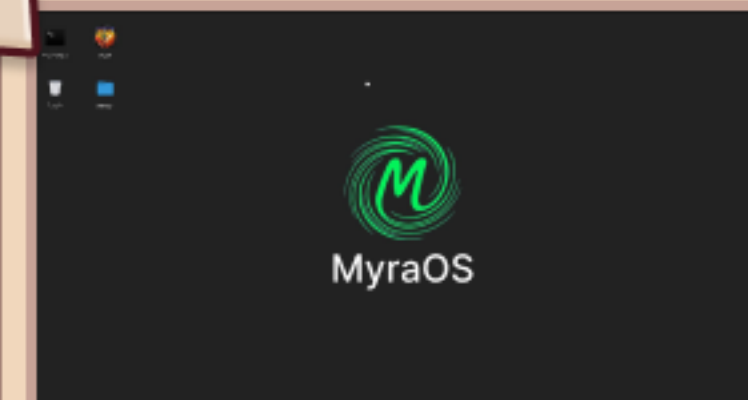
Discord, your way.

Revenge

by Palm

Discord, your way. Revenge is a client modification for Discord Android.

<https://github.com/revenge-mod/revenge-bundle-next>



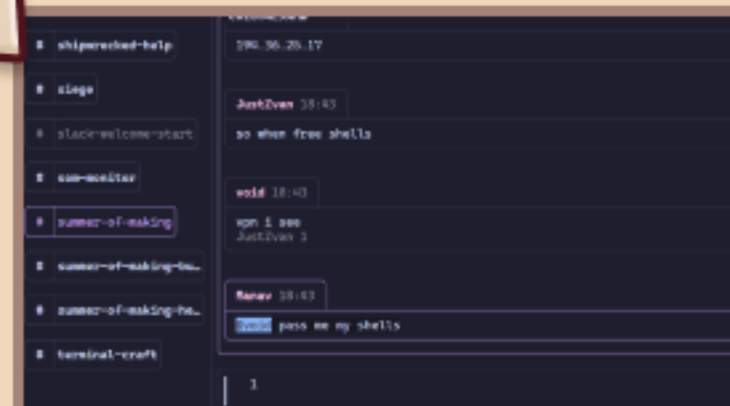
MyraOS

MyraOS

by Dvir Biton

A x86 Unix-like OS made entirely from scratch.

<https://github.com/dvir-biton/MyraOS>



HackCLI

by Jan Kur

Slack terminal client for Hack Clubbers, faster than sloppy Slack.

<https://github.com/Jan-Kur/HackCLI>



Ice2k

by Xcomp

A small desktop environment for GNU/Linux that looks like Windows 2000/XP.

<https://github.com/comdlg32/ice2k>

JUMP START!



build a game, earn a game console!

July 9th to August 10th, 2025

Led by Estella Gu (@magicfrog), 15, from the USA

RECAP (IN NUMBERS)

68

games submitted

33

first games made

1900+

hours of building

500+

channel members

150

hours of calls

26

countries



Running during Jumpstart during my Hack Club internship and afterwards has been so rewarding and fun. BIG thank you to Jumpstart's super vibrant, talented, and kind community! More on the next page :)



v2.jumpstart.hackclub.com/games

PLAY GAMES HERE & LEARN MORE!



GAME CONSOLES RECEIVED WITH THE CREATOR'S GAME ON IT!

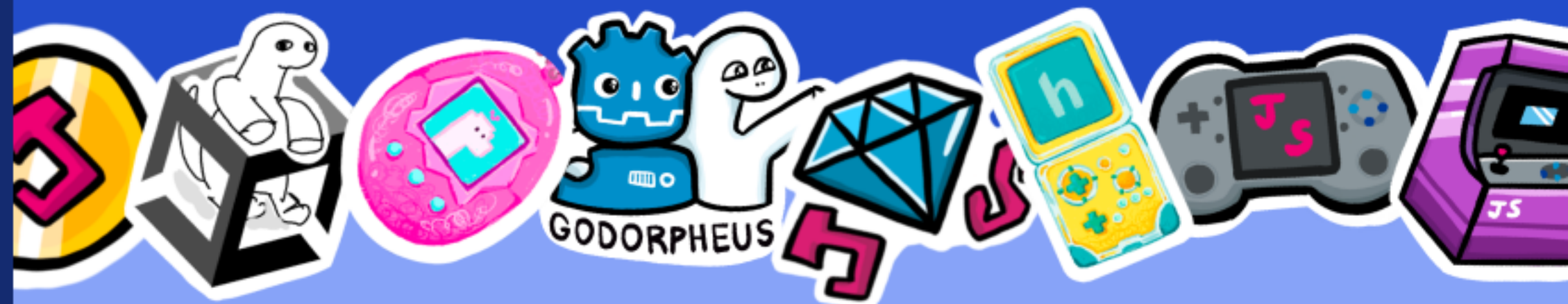


My main goal was to experiment and find the best ways to help everyone to create an epic game.

I created guides, ran events, built websites and a Slackbot (ZORP), learned about tools like Airtable, designed merch, and more!



THERE ARE JUMPSTART GAMES IN THIS MAGAZINE! :)



ZORP

a fun side-event Slackbot to reward interaction!



EARN COINS

GET STICKERS

- commenting on games
- hosting/attending events
- helping fix game bugs
- drawing assets
- meeting together IRL
- and more!





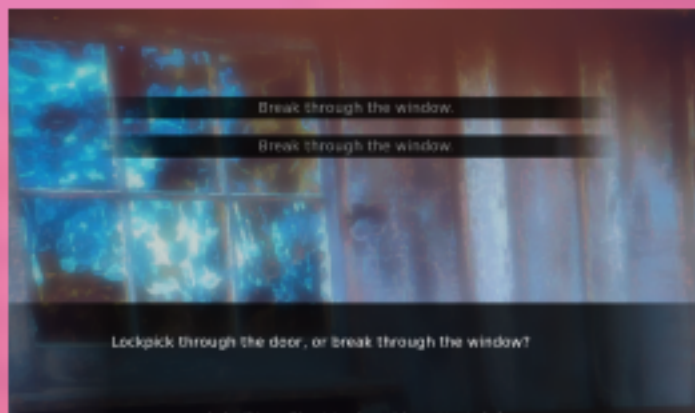
draw, write, and code a visual novel



Floorboards by Chuqi

a story- and art-focused type of video game!

- ◆ 60+ stunning games created
 - ◆ ~1000 hours spent
 - ◆ 18 different countries
- since July 2025, and it's still going!



Raconteurs & Historians by Slushie



Bean Sprout by Julia



made with lots of ♥ by RenRan, Kat, Shyla, Sophia, Susan, Yule, & Yunfei



gamedev ROULETTE

august 8 - september 5, 2025
made with <3 by tongyu

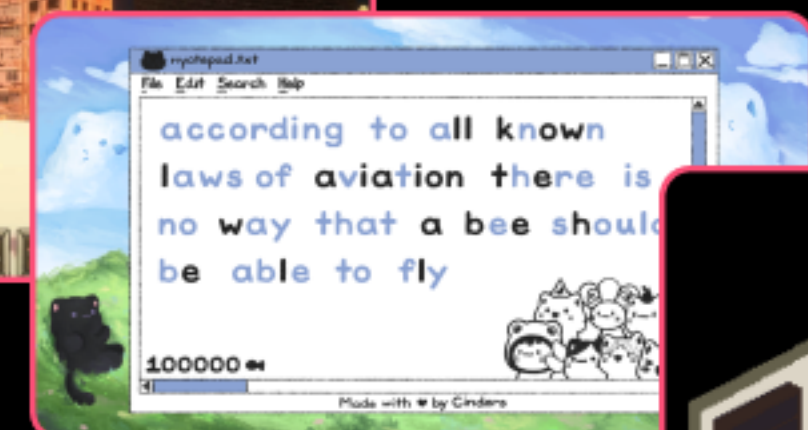
1: bet on your hours

hit 5 hours for 1.5x 5 → 7.5 chips	hit 10 hours for 2x 5 → 10 chips	hit 25 hours for 3x 5 → 15 chips
---	---	---

2: spin your wheels



3: make your games!



roulette had 4 rounds, each lasting a week, 81 projects, 1285 hours total.



SHIBA ARCADE

Online

Thousands of teenagers came together online to make games

IRL

30 teenagers made it to Tokyo for November 5th to 12th to create a popup arcade

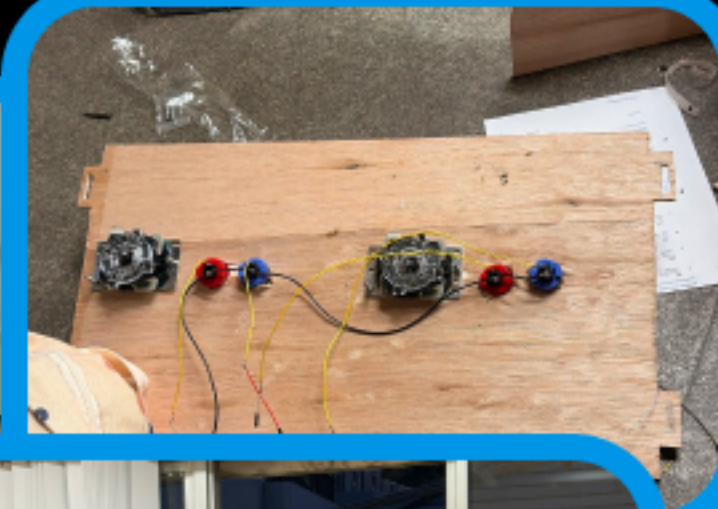


They each assembled their arcade machine and got their game running on it.

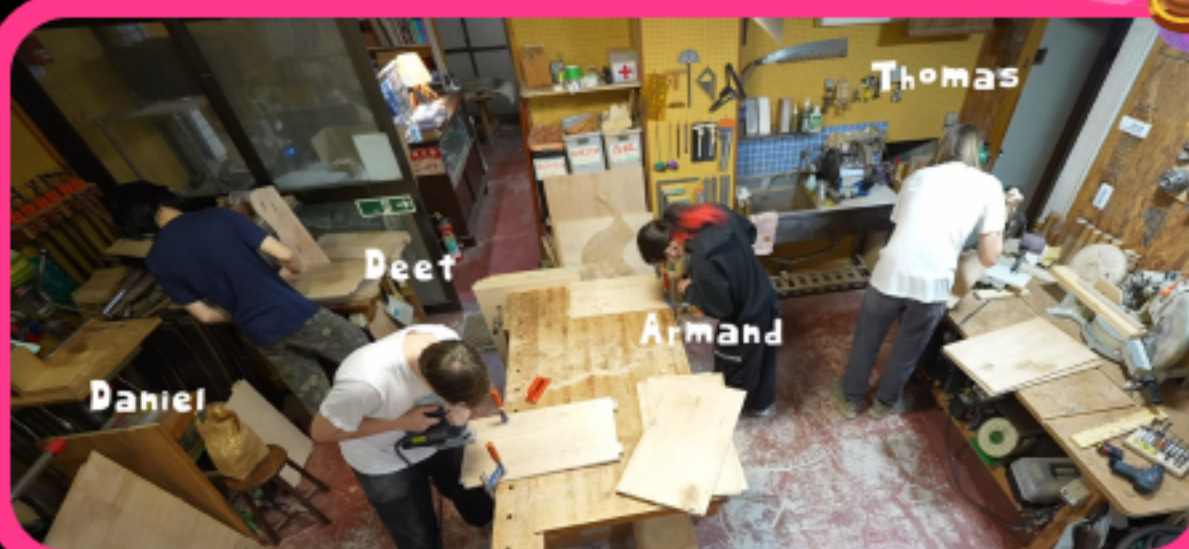


Hack clubbers

- soldered
- painted
- designed the layout to make their machines



Art by Kai Ling
Layout by Armand



We cut the wood in a woodworking shop in outer Tokyo



Blueprint

From October 2025 to March 2026, **Blueprint** funded **teenagers** to build **hardware projects**!

Statistics

- Over **15 thousand** teens participating
- Up to **\$400 USD** to make your project real
- More than **8 thousand** projects have been made
- 8 amazing **guides** made by the community
- **Best** Hack Club program **ever!** (may be biased)



PROTOTYPE

A robot that plays violin!



John Cohn as Santa!



Winners featured at AMD's CES



Prototype was a hackathon hosted as part of Blueprint, bringing together over 100 teens to build innovative projects using LeRobot arms, AMD technologies, and access to all the hardware they could imagine!

Cool robot arms!



make games, build houses,
earn prizes like a trip to singapore!



3700

users

330

submitted games

6000

approved hours

880

artlogs logged

milkyway was run by tongyu with the help
of many other hack clubbers <3
it ran from oct'25 to feb'26!





MIDNIGHT

Between January 4th and January 8th
70 teenagers came together in Vienna, Austria
to solve the murder of their aunt

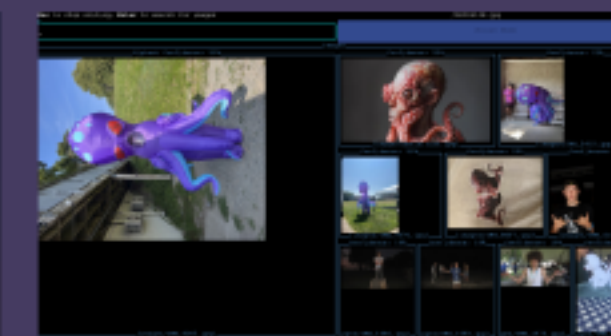


After 72 hours of building projects
and making friends, they
eventually solved her murder!

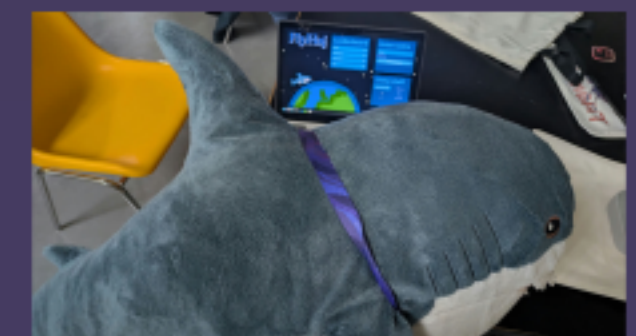
WINNERS



Midnight: The Game
A text-based murder
mystery made with
Godot that features
staff members and
attendees at Hack
Club's Midnight
hackathon



Hedgeseach
A Rust CLI tool that
uses a from-scratch
ML model to look up
photos based on
keywords.



Flyhaj
A competitive game
using a blahaj & a
phone to see how far
you can throw the
shark!



code 10hrs/week for 10 weeks,

Siege

Siege was a 15 week program by @Olive and @kl (Kai Ling) where teens coded a project every single week, with weekly themes and stickers. Everyone who lasted to the end got a laptop!

Here are some of our favorite projects:

Week 5:
Coins

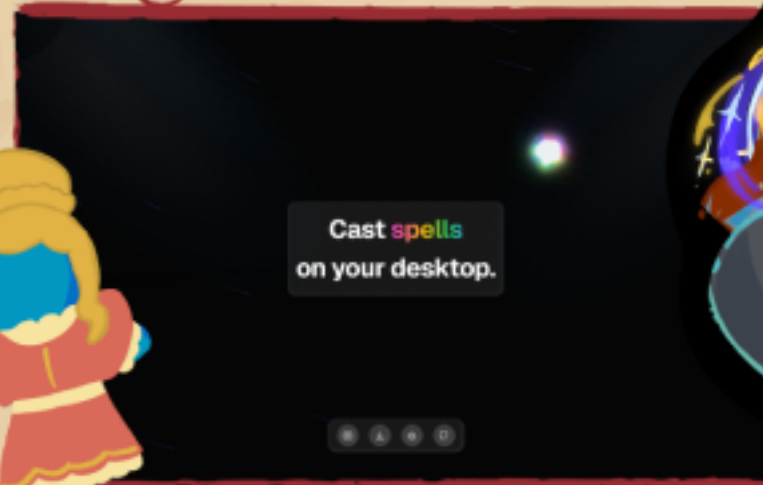
@PixelSaver



<https://github.com/PixelSaver/just-u-and-i>

Week 6:
Magic

@Andromeda



<https://github.com/ThatOtherAndrew/HexecuteWebsite>



Week 10:
Grid

@OrigamesHD

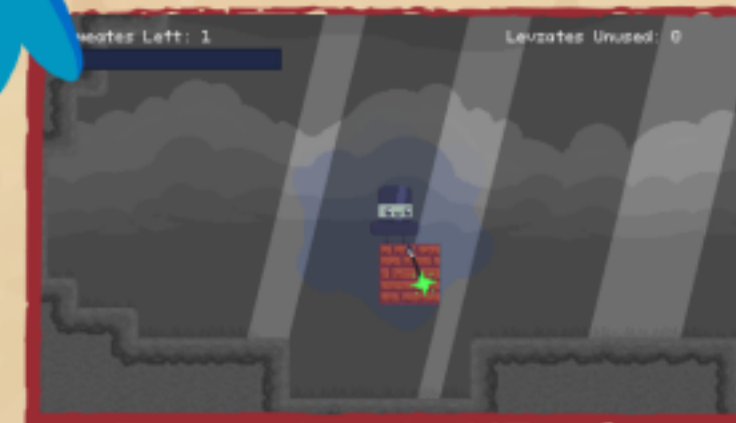
<https://github.com/OrigamesPlayz/Off-Grid>



Week 9: Signal



<https://github.com/Limit-sest/wiretap>



@Baton

<https://github.com/appellatebaton/siege-2>

- ~ 15,000 hours of code & 1560 fantastic projects made
- over 75,000 USD worth of prizes earned
- 100+ laptops shipped out

...at the end
of Siege!

get a Framework laptop!!

so you want to make a personal site

intro.png



personal sites are magical, they're your own customizable corner of the web. they're a place for showing off your projects and interests, and for other people to learn more about you!

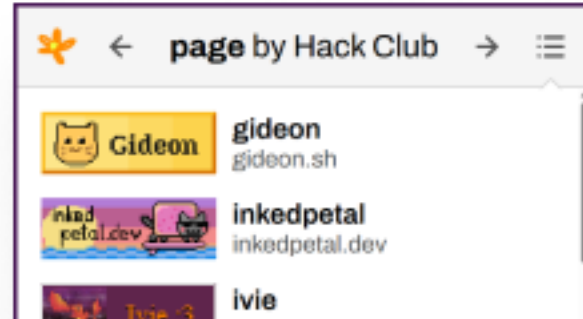
this autumn, 56 hack clubbers spent 1000+ hours making their very own personal site, in exchange for their own domain name, a super-cool limited edition t-shirt, and (of course) some stickers 🍷

page_webring.png

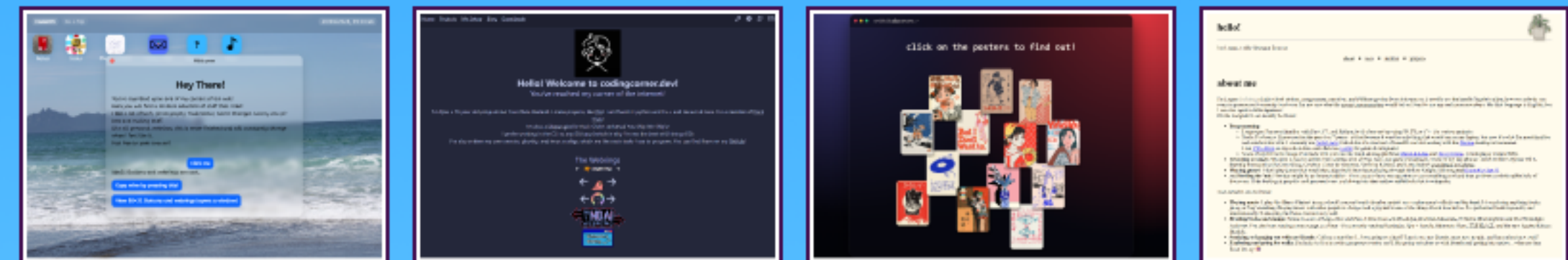
page webring

a collection of Hack Clubbers' personal websites. for other people (like you!) to go explore and get inspiration for making your own.

<https://paging.hackclub.com>



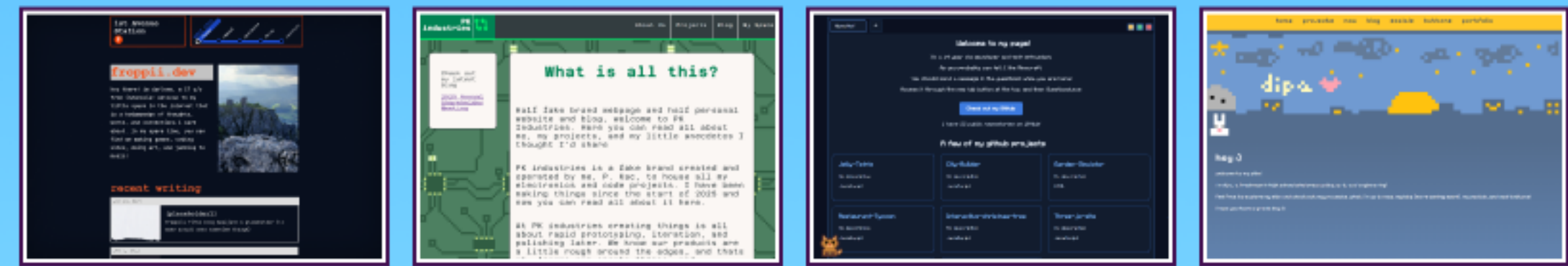
josh os.slitrostudio.me kyle codingcorner.dev srithika inkedpetal.dev logabe logabe.net



junya cutiesin.tech violet b vvqb.dev finn finnh.ca yash yashuu.in



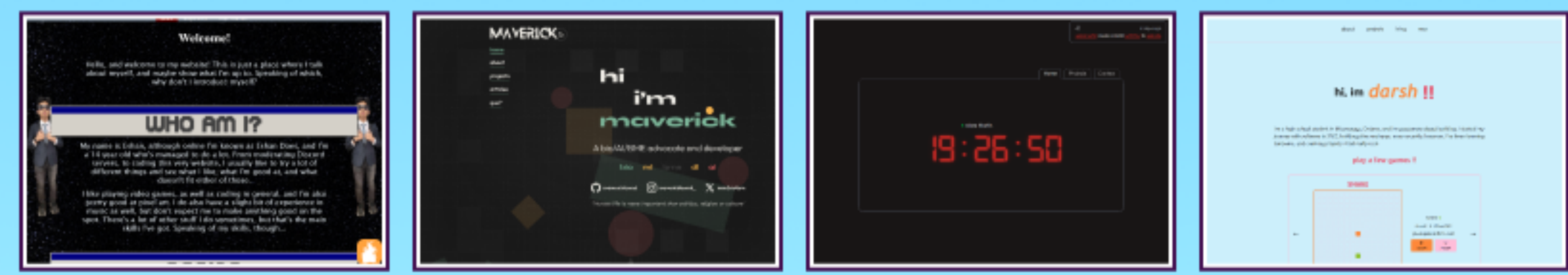
froppii froppii.dev parker pkindustry.org carlson dinosaur890123.com diya diya.lol



foxy page.wiffles.xyz sarvesh sarvesh.rocks vejas vejas.zip vulcan vulcanwm.com



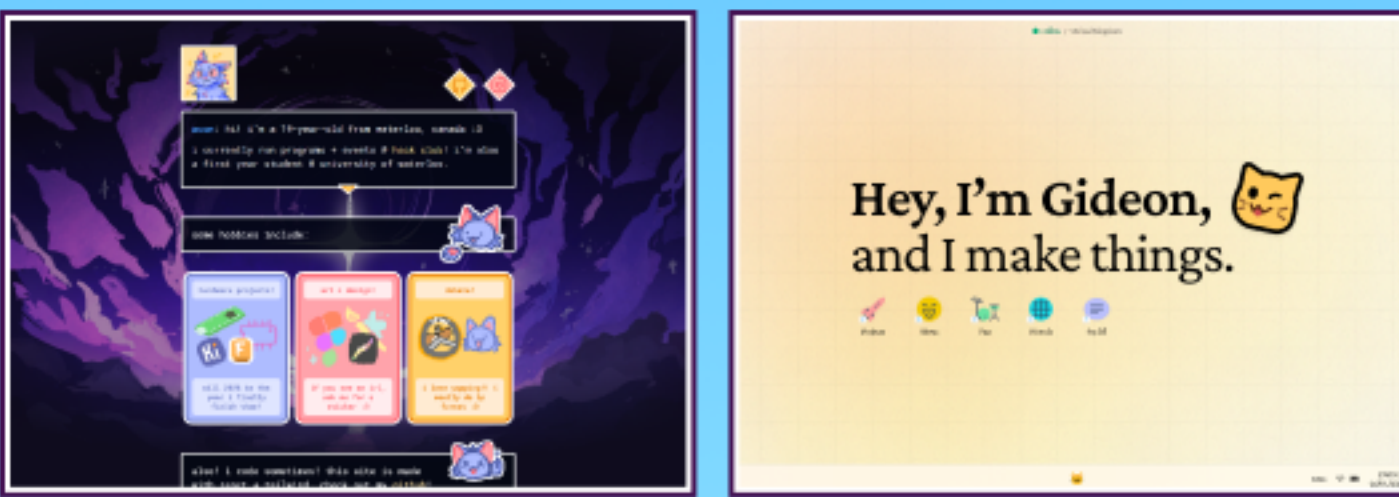
eshan eshandoes.com maverick maverickkamal.com alara clock.alaramartin.com darsh darsh.app



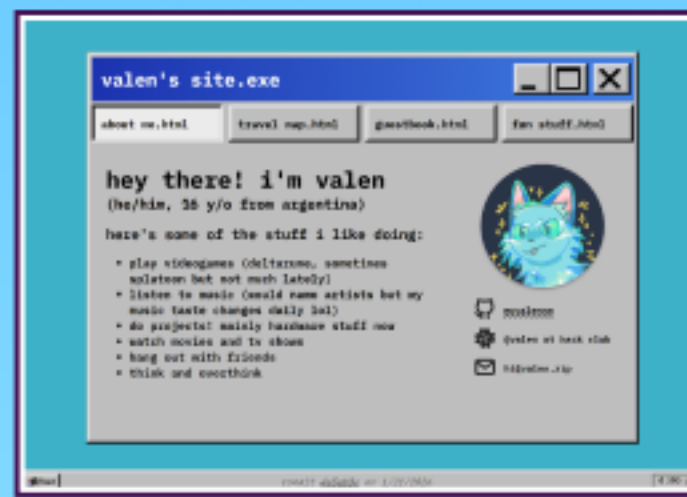
krish ikrish.dev dwait dwait.dev charlotte charlottewoodrum.dev hex4 hex4.xyz



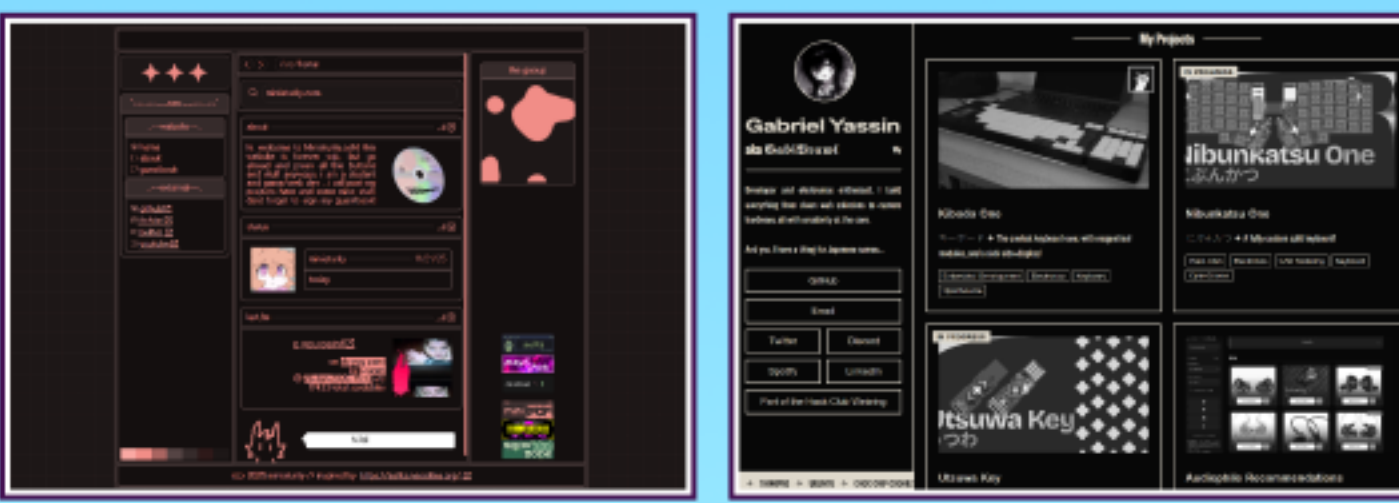
acon aconlin.com gideon gideon.sh



valen valen.zip



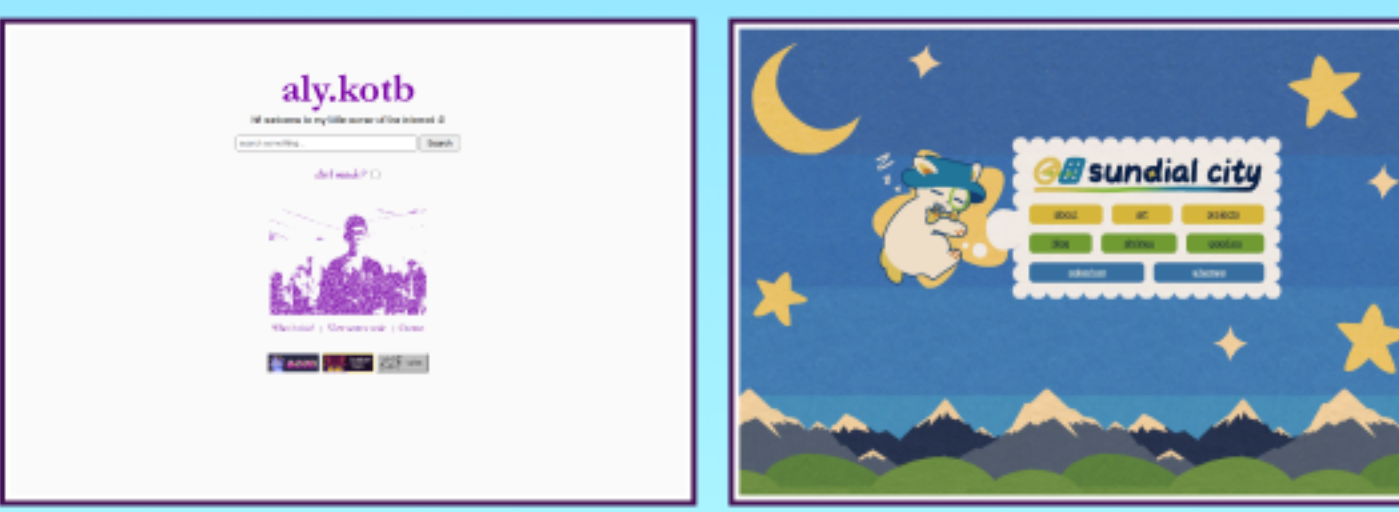
miniaturity minipa.ws gabibrawl gabibrawl.dev



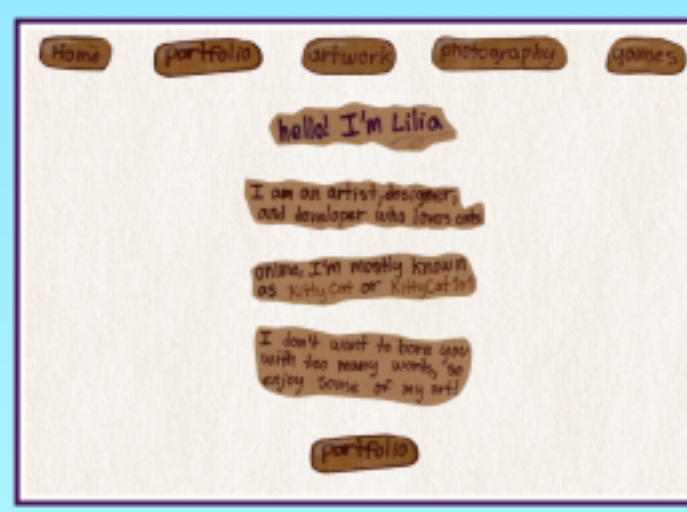
joy su byjoysu.com



alykotb alykotb.dev nick sundial.city



lilia lilia.rocks



HackerPet

Jan to Feb 2025

code a
virtual pet



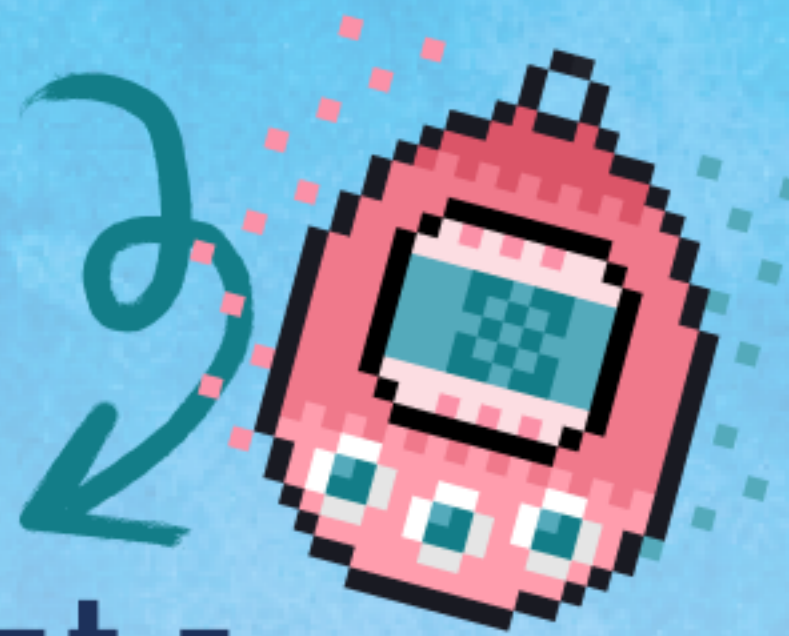
Goose
Odyssey



site!
learn about the
program



repo!
includes all
games, pcb, and
firmware



get a
tamagotchi
clone!

- mcu: esp32
- 1.5in rgb oled screen
- 5.6 x 6.6cm



GitHub | Hack Club
Presents...

Flavortown

Dec 22nd to Mar 31st 2026



Code
personal
projects.



Win tasty
prizes.

As of Jan 25, Flavortown has ...

~6,500 ~2,000
Users Ships

~10,259
Projects

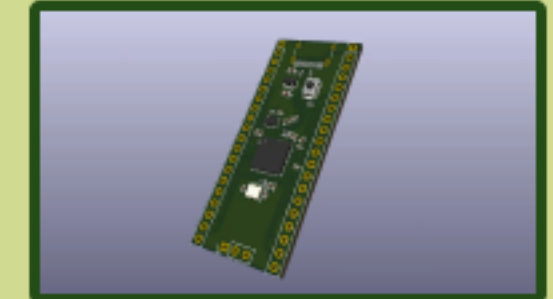


Including collaboration events like:

- A partnership with the Challenger Center, offering a chance to meet an astronaut
- A collaboration with Technology Connections

Featured projects

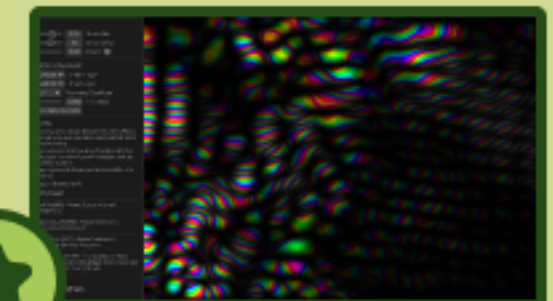
Mini RP2040 Computer from
Complete Scratch



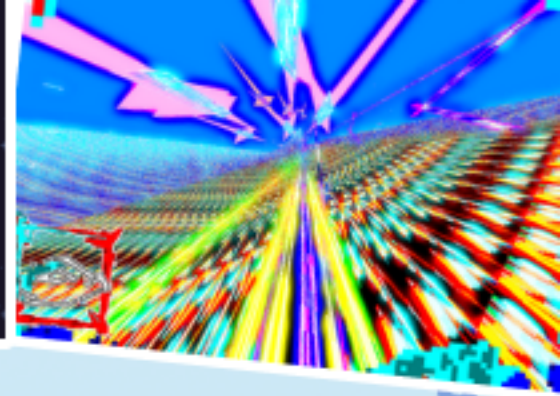
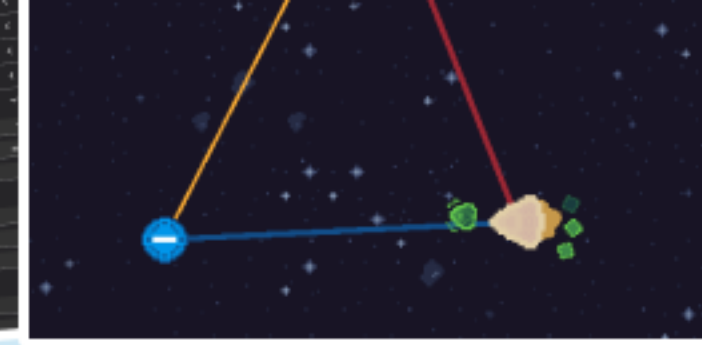
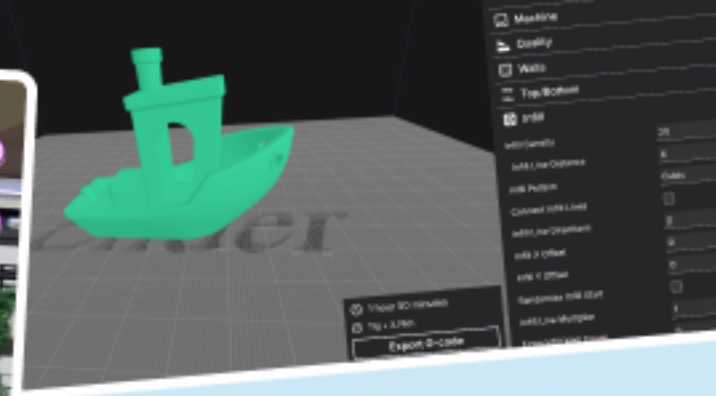
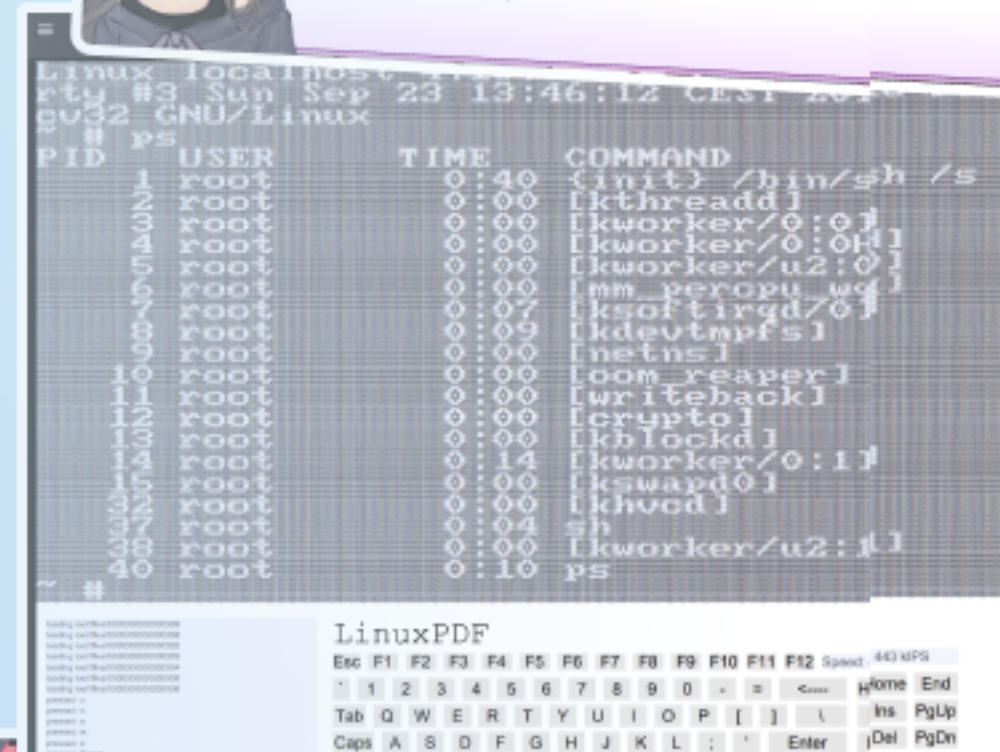
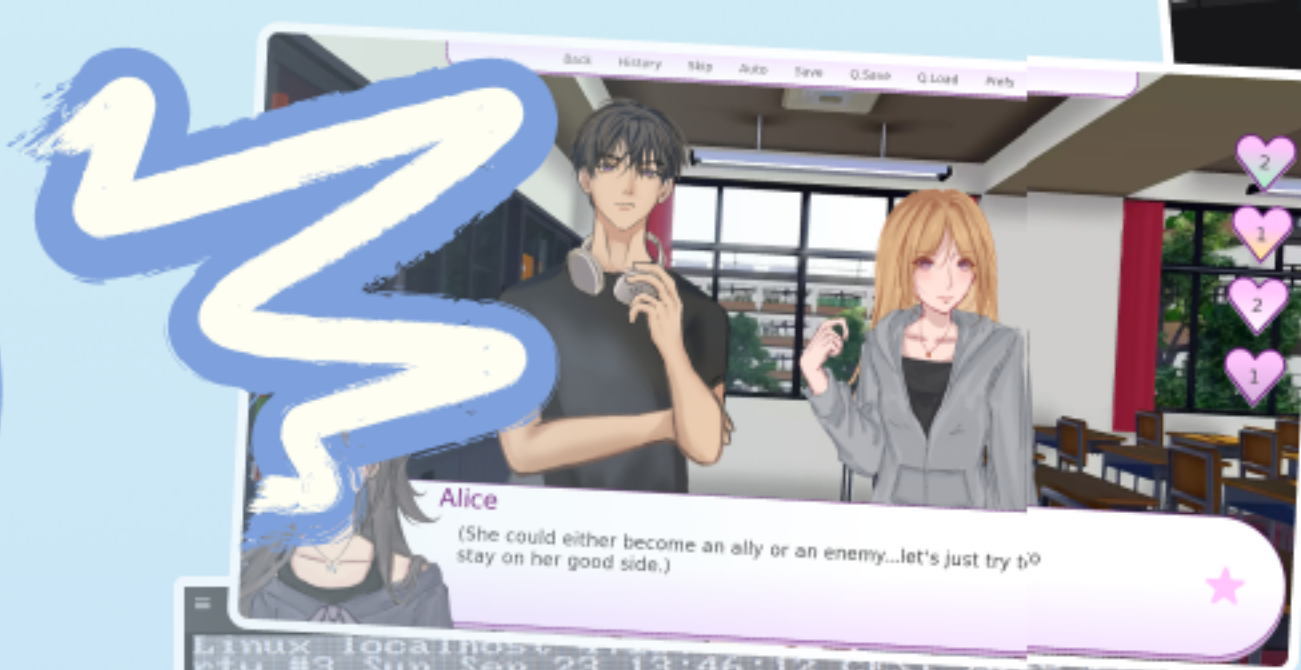
Mindstorm INO V1



Quantum Echoes



SOFTWARE PROJECTS



Axtro / specter / OKRIM / TRIHAZ3L / MUT4RR / D2DL1 /
 Lepidoptera / Tanuki Snowboard / wafall / 21st Century Love Story /
 probe dies / tabletop / out perform / wayward / DoomPDF /
 LinuxPDF / One Shot / railgun / Engrams Of Chaos / Hackamon /
 York / CIRCUITS / tanuki / OrienteeringVR / The Climb / Explorie /
 Sprig Fishing / womble / trout / INFINITY LOST / One More Day /
 Flourish / Unfaircraft / Arsenal and Anvil / rtw-tui / rtwlib / music
 map / Shiba Runner / The Birb / ScramJet / webleste / Spicetown /
 Logpheus / rustytime / Hackatime Heatmap / xkcd-webapp /
 networkify / Slack Annoyance / Paramath / TimeCheck 22 / Bubble
 Network / Orbit / Asteroid Watch / classiflower / Sinusonic /
 hexecute / OpenInk / HC Wrapped / Dimensity / student / Liveboard
 / README Programmer Debates / Peek / Volumes / Nutmeg /
 Oscilloscope Online / ntwatch / journalcli / Operation: Falcon Nation
 / Big O's Loop Lab / Regreso / LtAmp.py / The Twist / TOAD / SSHUI
 / Universal Comms Bot / yourdns / MosaicSlicer / Filatrack / Dote /
 Rotatetoe / JustABouncingBall / tuning systems / aftonsparv /
 MosaicSlicer / Filatrack



AXTRO

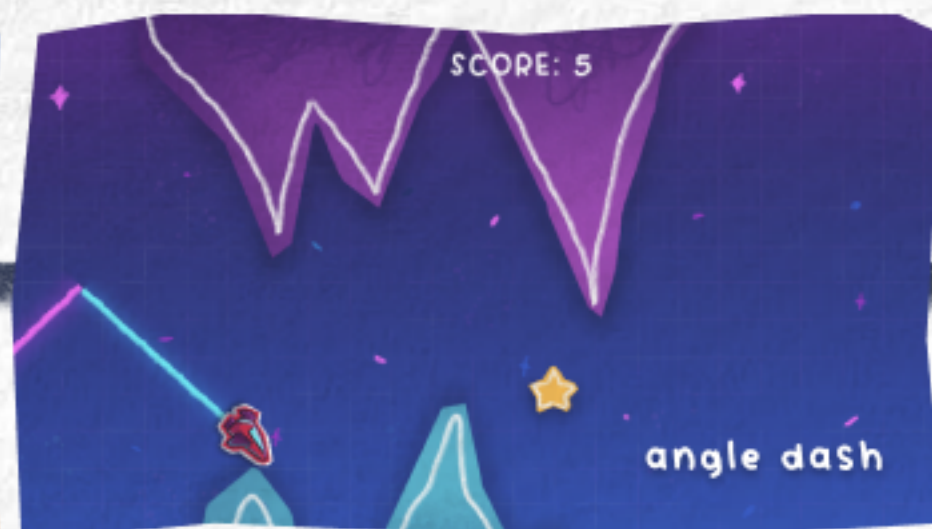
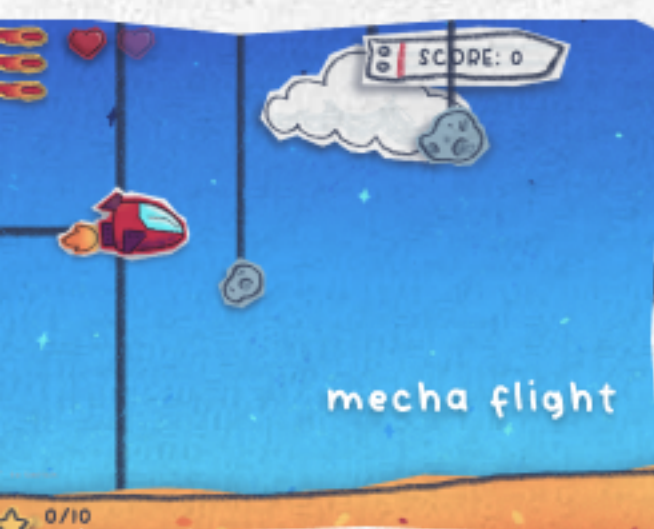
By Ayessa
(18, Philippines)

play it here!



A game with arcade game style and paper / cardboard cut aesthetics, featuring different game modes to choose from!

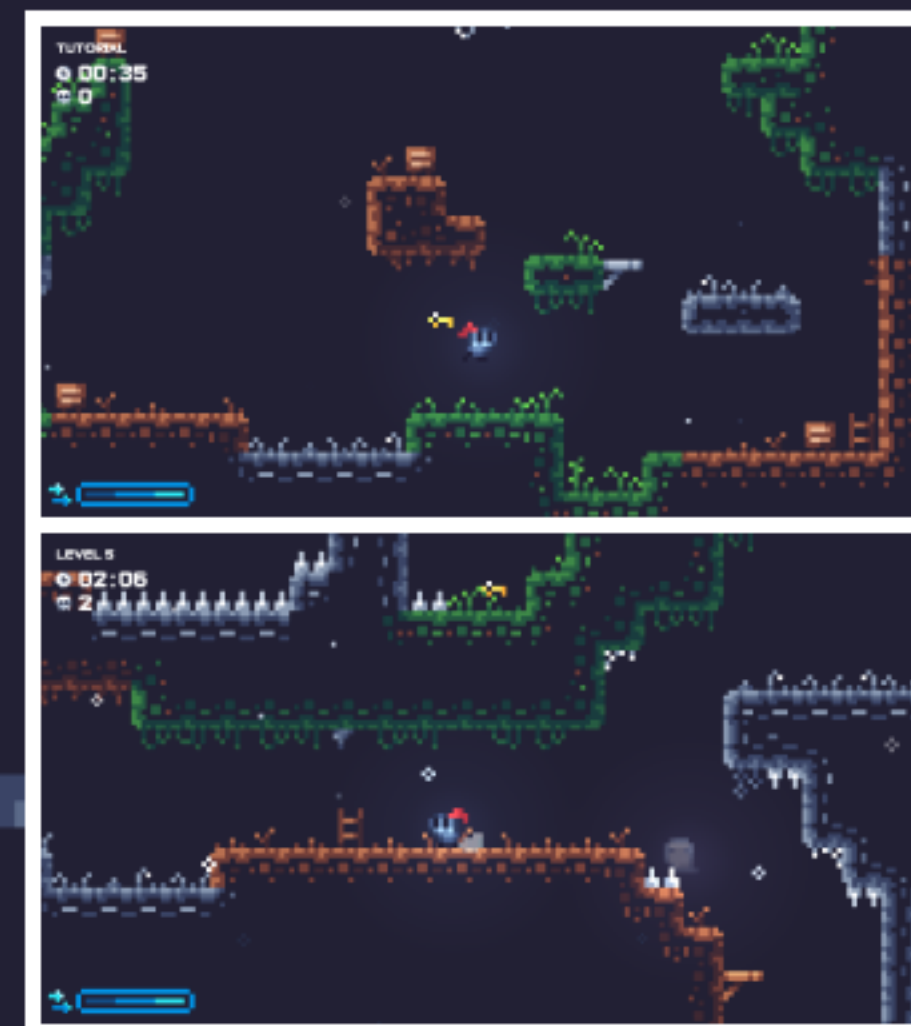
itch io: <https://shaaarkai.itch.io/axtro>
repo: <https://github.com/ayessaaa/axtro>



specter

/ˈspektər/ noun

a visible disembodied spirit



A game about a knight bravely trying to escape the cave but he is haunted by his own ghost. His last gameplay shows up as a ghost in the next run. Would he let this distract him or use it for his advantage? It's for you to decide.

itch io: <https://shaaarkai.itch.io/specter>

repo: <https://github.com/ayessaaa/specter>



play it here!

By Ayessa
(18, Philippines)

SPECTER

OKRIM

MUT4RR



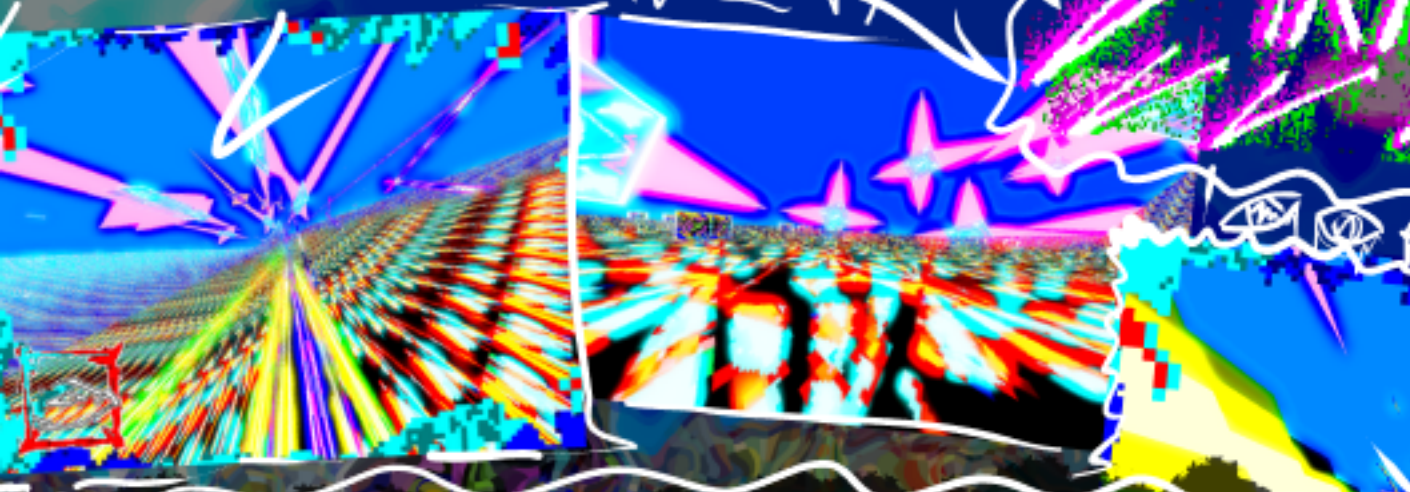
New loop
Options
Phases
Exit

I'M NOT HUNGRY

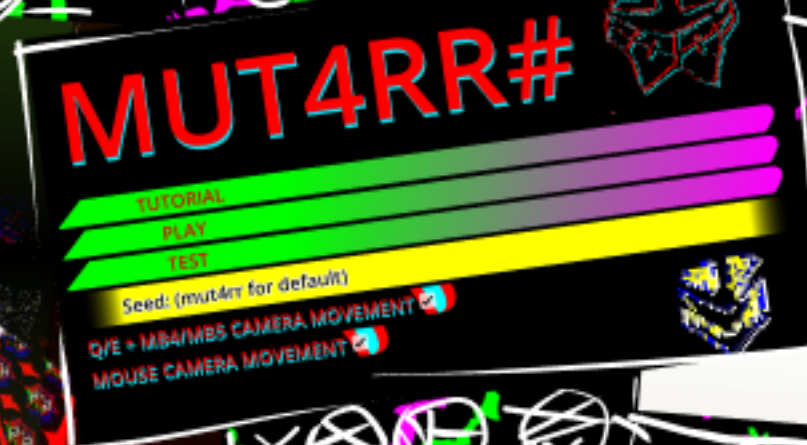
OKRIM was my first game at HC and is about going through your daily routine.. till the whole reality falls apart. As reality fades in, you can see that you have been living in delusions this whole time. But after a while, you find yourself inside a familiar yet so different space...

PAGE 1
Emments
18yo from Latvia

TRHAZL



TRHAZL is a supreme fast paced runner, where you go around an island running circles as gods look upon the rabbit as it hopelessly runs around trying to run away, where there is nowhere to go. As you aimlessly run around using rails and boost boxes and maybe, some day, some way, find what you are looking for.



MUT4RR is a puzzle game with time wrapping mechanics. As you are trapped in an infinite time loop replaying the same day over and over, you must find all the statues and destroy them, before destroying the generator to free yourself before the timeline collapses.



PAGE 1
@noob-090LV
www.noob-don.org

D2DL1



D2DL1 is a terminal typing game, as one day you receive a package with A PIPEBOMB???! And you have to work for noob.corp.c00l and review games BEFORE YOU EXPLODE. As you work with a double split terminal, you can see your hands move faster and faster with each second.

LEPIDOPTERA

by Lev
14, Czech Republic

Collect the
butterflies by
pressing E



A 3D horror game-
Collect all the butterflies to
regain the memories of your old
life.
But be careful! Those who haunt
this manor will do anything to
keep you out...



GitHub repo

Play here!



Fun fact: the game development
took around 120 hours total!

Find the rest to escape...
but be aware of the
spirits.
They know you are here.

GAME OVER

The spirits caught you...
...try again?

A
SHIBA
ARCADE
game

Tanuki Snowboard

In this crazy fast snowboard
racing game, you'll have to pul
off some radical midair tricks
if you wanna take the lead.
ARE YOU UP 2 IT?



1st

Race friends around the world
with online play, and express
yourself with custom emblems!



PLAY
IT



Hey, I made the stuff on this page!

I'm Sebastian, some 17-year-old from
the US. I made these two games in
Godot for Hack Club's Siege event!
Tanuki Snowboard
was a lot of fun to
make. It started as an
attempt to recreate
the Sonic Adventure
series' boarding
segments, but the
online multiplayer and
insane physics turned
it into a favorite among
friends.

Unlike Tanuki Snowboard,
Wafall was a one-week meme
game that I didn't expect to be
as proud of as I am. Inspired
purely by an edit of that falling
waffle video, I managed to
polish up the controls and
presentation to a degree I
really haven't done before. I
also put a filter over the whole
game to make it look like a
crusty jpeg. Amazing.

wafall

What is a waffle
born to do besides
fall down an
infinitely long well
and dodge lasers
until it inevitably
explodes?



Customize yo' waffle



Select your waffle
of choice and
weave through a
variety of laser
patterns with silly
physics! How far
can you get
before it's
wafflover?



FALL!
F
GAMING

21ST CENTURY

Love Story

REPO



GAIN OR LOSE AURA.



Kaylee: Athena (Rhode Island) and I (California), both 17, became friends through the online K-Pop journaling community during COVID (pretty niche LOL). We grew up with the same interests; we both went from journaling to gaming to drawing and now, to coding.

And, wow, visual novels are sooo fun to make. What better way to combine all of our interests? We both do da drawing and da coding.

21st Century Love Story is the first game we ever shipped together (more to come?!), made using Ren'Py :) It's a satire visual novel with a cool MC and different male leads—who are each based on different social media archetypes. Play for yourself to see what I mean, hahaha!

DEMO

MADE FOR MILKYWAY <3



ATHENA CHANG

KAYLEE DINH

"bring forth the days" Prode diēs.

a visual novel programmed
with renpy and drawn in
krita for storyboard
october 2025

29 HOURS

4 ENDINGS

the enemy is closer than you
think.

Rod is the protagonist. Rod
was murdered.

They reawaken two months before
their murder... what will they do
about it?



herbeon.itch.io
/prode-dies

MADE BY HERBY, 16 Y.O. CANADIAN:D



venture through a
calm 48-level 2D
platformer & 3D
lobby!

made with godot,
procreate, & blender
& a little crazy

featuring jun :)



Stay cool <3



hi, i'm
julia do!
17 ♦ USA ♦ @oodlia ju



demo



repo

#julia-is-losing-it

**out
perform!**
♦ julia do

be the better employee and make the best performance!
a rhythm game where your rank increases with your
high score. perfect your resume!



demo



repo



demo



repo

wayward

the seas call your name...

julia do ♦

send lost souls
of sailors on
their way back
to the mainland
by playing
games with
them.



but beware
the corrupted
that have
been at sea
for millennia...

< anchor yourself >
< anchor yourself >
< anchor yourself >
< anchor yourself >
< anchor yourself >

< set sail? > ? ? lost are you lost? ? ? lost? ? ?
are you lost? ? ? are you lost? ? ? are you lost? ? ?

Doom PDF



Try it here!

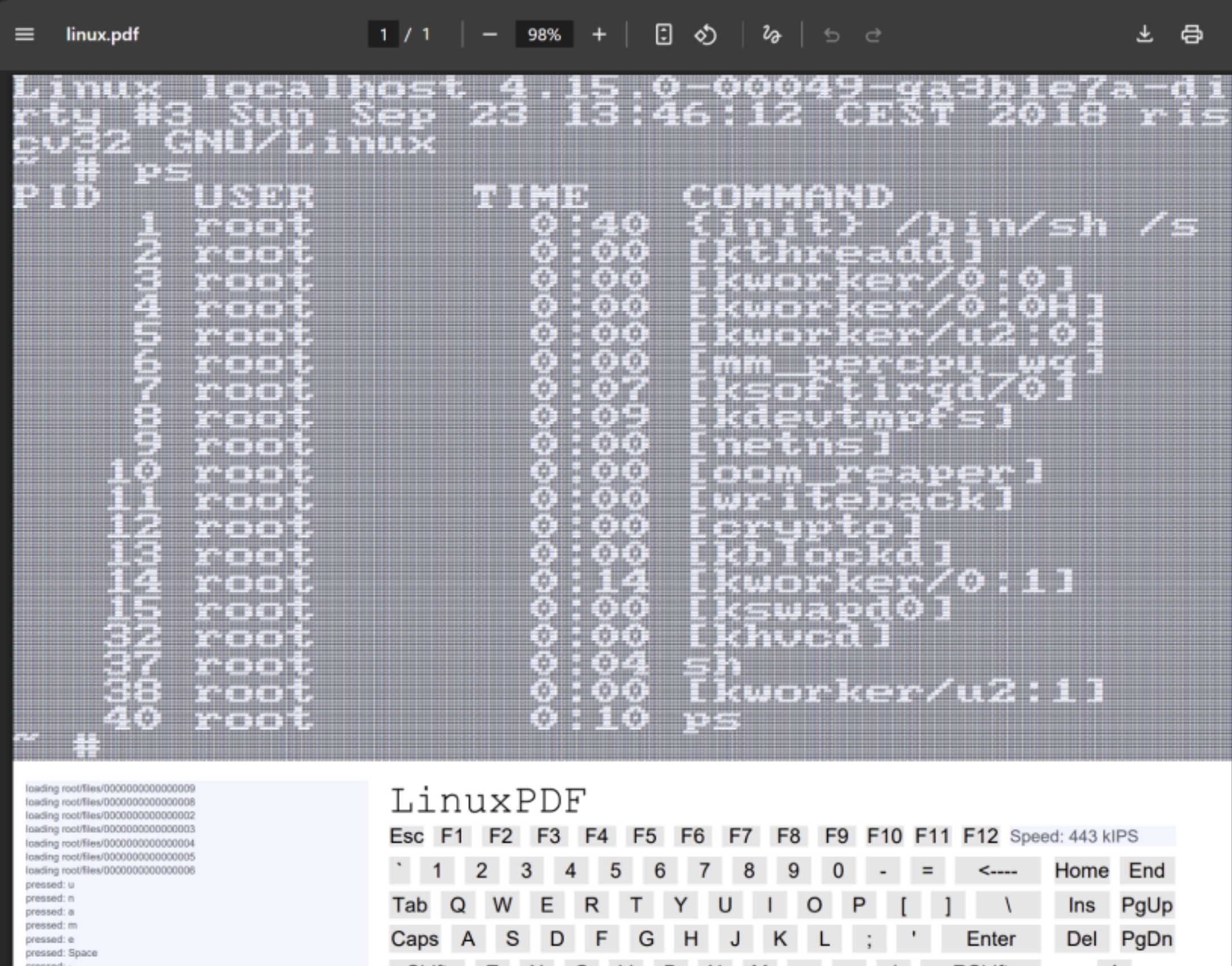
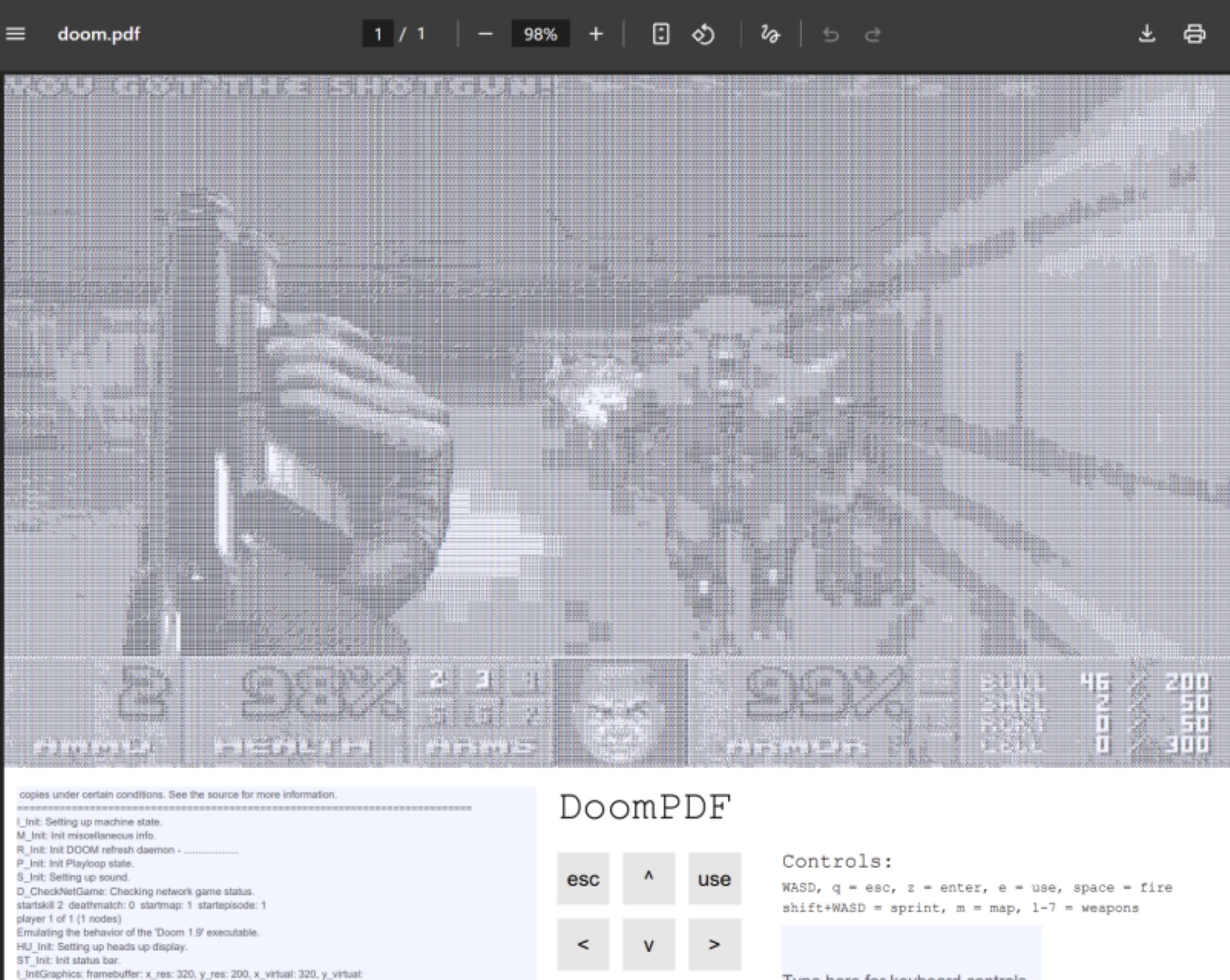


Demo!

Linux PDF

A source port of *Doom* (1993) that runs inside a PDF document

A RISCv32 emulator that runs Buildroot Linux in a PDF document



You might expect PDF files to only be comprised of static documents, but surprisingly, the PDF file format supports JavaScript with its own separate standard library. Adobe Acrobat is the only PDF reader with a complete JS implementation, and it supports some crazy things like 3D rendering, HTTP requests, and playing audio.

The PDF specifications genuinely say this:

12.6.4.17 ECMAScript actions
Upon invocation of an ECMAScript action, a PDF processor shall execute a script that is written in the ECMAScript programming language. That script may include the extensions described in ISO 22537:2006. Depending on the nature of the script, various interactive form fields in the document may update their values or change their visual appearances. ISO/IEC 16262:2011 and the *Adobe JavaScript*

Built by Allen D (17, USA)

Browsers such as Chromium only implement a tiny portion of the full JS API surface for obvious security reasons, but they still allow JS. Thus, we can do whatever computation we want, just with some very limited IO. Using the Emscripten toolchain, we can compile C code to asm.js, an optimized subset of JS. This allows us to compile Doom's source code to JS which can run inside the PDF.

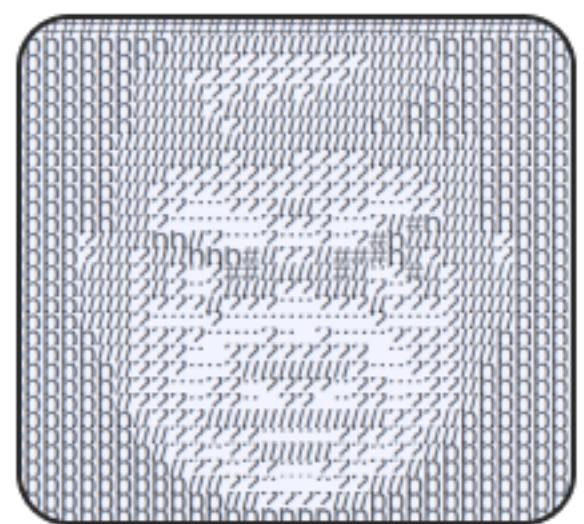
Source code on GitHub!



Input and output can be handled by manipulating text fields and buttons. To display a framebuffer, we create 200 stacked text fields, and set their contents to rendered ASCII art text. Inputs are handled either with buttons which run a JS callback or monitoring key inputs inside text fields. DoomPDF and LinuxPDF both use this same IO system. The final PDF file is generated from scratch using a Python script.

DoomPDF is based on the doomgeneric fork of Doom, which vastly simplifies porting. LinuxPDF is based on the TinyEMU RISCv emulator by Fabrice Bellard.

More source code!



If you zoom into the PDF, you can see all of the ASCII art that makes up the display.

Built by Allen D (17, USA)

One Shot

Made By: 4_Square / Bob the Builder

One Shot was my very first video game I ever made. Originally it was meant to be a puzzle platformer but as time went on and I continued working on One Shot, the direction of the project changed.

One Shot is a VERY fast paced rage platformer that's unique by its movement as once you start moving, you can't stop moving.

Itch.io Link



GitHub Repo



Made for Hackclub Jumpstart
Updated in Hackclub Milkyway



Login once, and you won't stop playing! (You can't logout...)

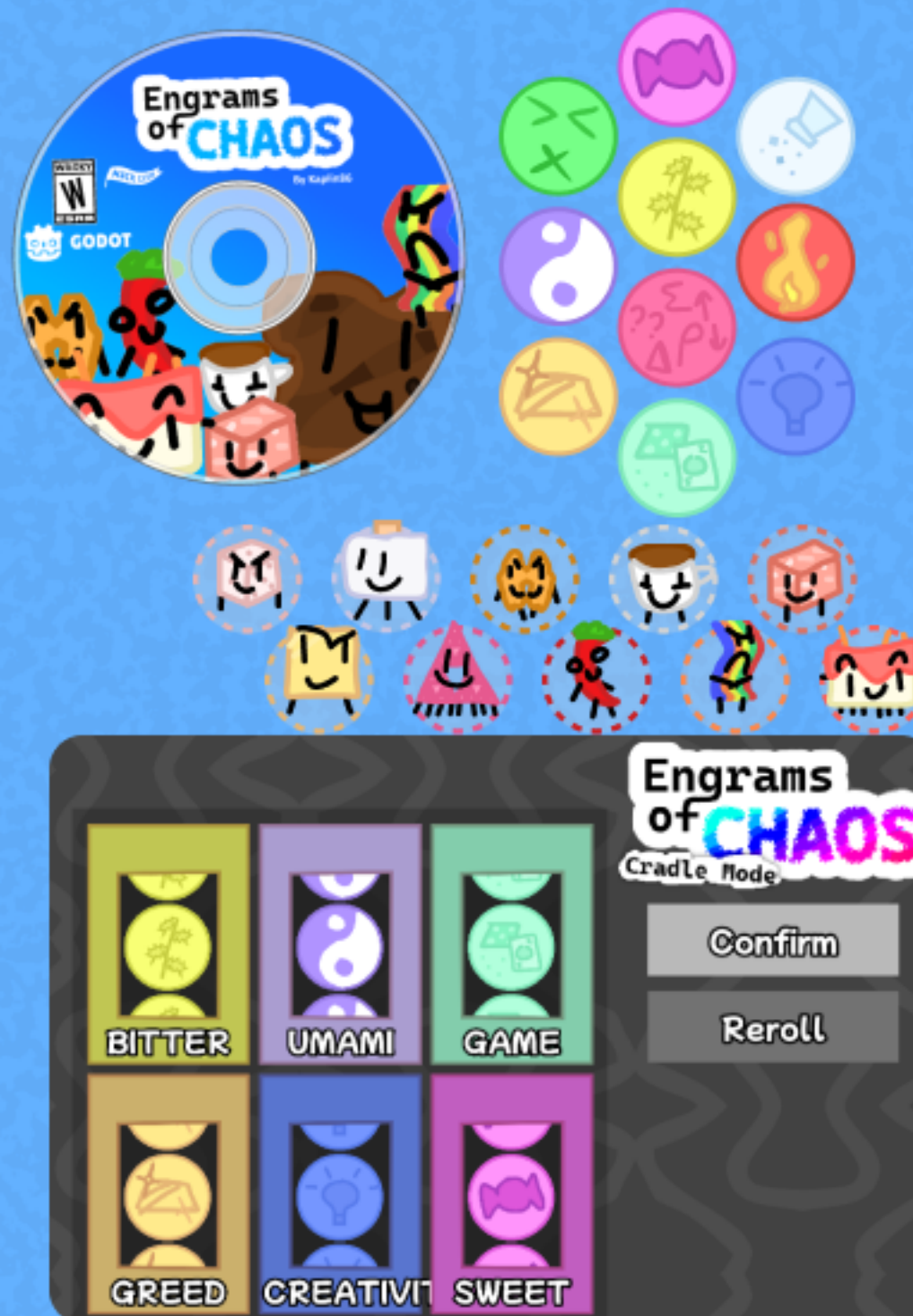


RAILGUN

——レールガン——

Fan-Inspired SAO VR Game with Immersive SFX & Visuals

Ryan Mai, 16
Toronto, Canada



Engrams of CHAOS

By Ben "Kaplin86", a 16 year old from Virginia, USA

Engrams Of Chaos is my take on the "Autochess Game" format, One specifically made to be played on an arcade cabinet!

You place units on a board, beat enemies, get engrams, then use the engrams to make new units, and repeat! Try to get the highest score you can!

There are over 60 Units, each with their own ability and synergies



Featured in the
SHIBA
ARCADE
in Japan!



HackaMon

Made by Muhammad Irtaza - 16, Pakistan

A custom Tamagotchi game, with lots of mini games! I originally built it to run on an ESP32-S2 Mini 2 powered custom tamagotchi!

With gamified utility programs such as coin flip, dice roll, and a stopwatch tool!

And I then modified it to also work on the Sprig!

I spent 31 hours making it!

Scan for repo



Windows PowerShell

PS D:\York>

YORK

```
while (light-->0) {  
    fear++;  
}
```

YORK is a terminal-based 2D sandbox game where you build, craft, and struggle to survive while uncovering a rich and engaging story

You can explore an infinite world, mine diamonds, and build houses—all inside a game that runs entirely in the terminal

REPO



This is the player and you control him

DEMO



made by Krishna

hex4's
projects

12 · Alberta, Canada

DON'T CLOSE THE LOOP

CIRCUITS

CIRCUITS is an arcade-style shoot-em-up, but with a twist - there are two kinds of enemies, **positive** and **negative**, constantly trying to form a link to your ship. If both kinds of enemies connect to you, they form a **loop** and you'll short out.

(this was the jam theme)

This game was built with Godot and art drawn with Aseprite in just 96hr as part of the GMTK Game Jam 2025 - itch.io's largest game jam! It's got some rough edges, and the performance could be better (who knew doing thousands of vector calculations per frame would tank your FPS??), but I'm very proud of what I could make in four days :D

PLAY
HERE:



tanuki

is a little desktop app that plays the hourly music from Animal Crossing games, right on your desktop. vibe out to New Horizons, rain sounds, or some K.K. Slider as you work! it was my first time using Tauri in a project :O

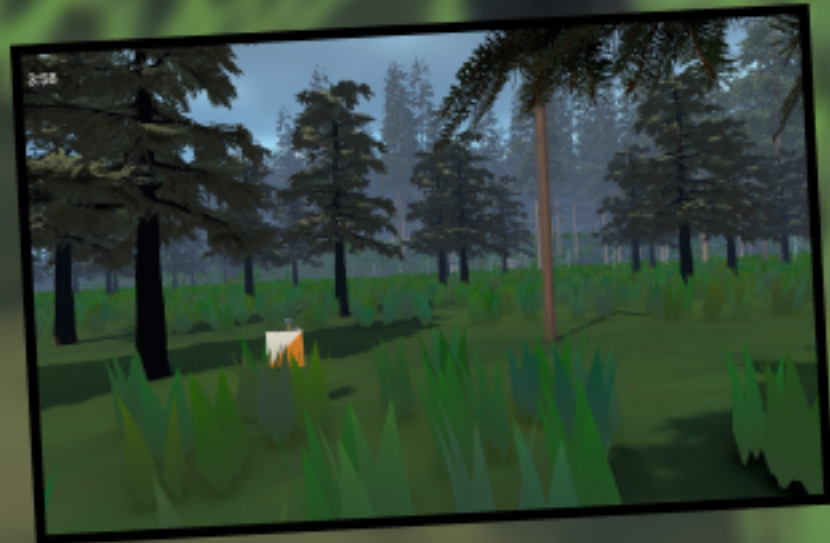
download:



OrienteeringVR

Made by Mejspek (Wiktor Kociuba), 17, Poland

An orienteering simulator,
available both for PC and VR,
where you have to complete a
given route using only a map and
a compass.



Made during Juice
Upgraded for Milkyway
In total 210hrs of work

It features real life or custom map
generation, for maps that were
made in OpenOrienteering Mapper!



Website



GitHub



Interview
at Juice

EXPLORIE



GitHub repo!



Demo :3

Explorie is minecraft mod which makes you a true
explorer by helping you locate structures and
ores through the Explorer's Ore Map and the
Explorer's Structure Map.

Made by Zaid with <3

This mod was made in Java
with help of an amazing mod-
loader called Fabric! :3

- detects structures and ores
under a 500 block radius!
- helps uncover any kind of
ore or structure!
- gives exact coordinates to
the structure or ore!

Explorer's Ore Map!



Explorer's Structure Map!



THE OLIME



A difficult, Celeste inspired
platformer with a grappling
hook. Made in a week for the
Brackeys Game Jam 2025.2

By Alex Giller - 17
and
Samik Mooherjee - 17
From New Jersey

Demo

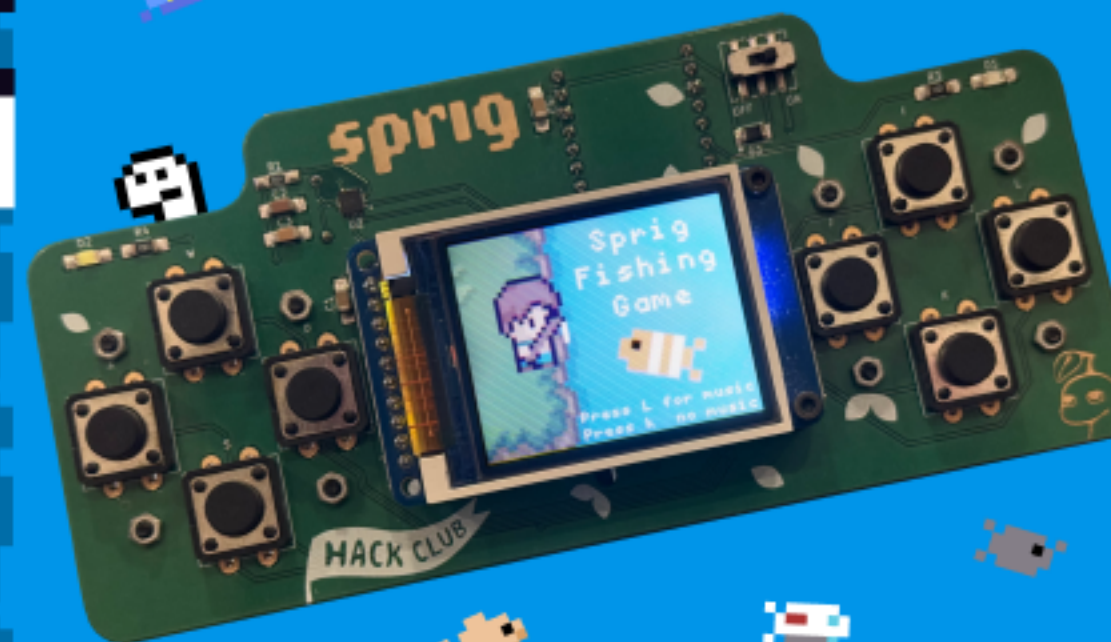


Code



Sprig Fishing

By Colin 18, Canada



15 fish
to catch

7 areas
to fish

Written
in pure C

A small fishing game made
from scratch for the
RP2040 based Hack Club
Sprig game console



a wordle game
inspired by balatro
keep your combo
and get a new high score

made w/ <3 by miniaturity
a 16 y/o front-end developer
from nyc

points 117
lives 4
guesses 56
high score 999

points 999
lives 2
guesses 56
high score 999

1.25x
1.50x
x10

repo demo

how to play

womble

by miniaturity // ui inspired by

combo

mult

combo

x7

x10

P	O	D	G	Y
G	R	A	I	L
C	R	A	I	G
A	G	A	I	N
A	G	A	T	E
A	G	A	R	S
A	F	A	R	S
A	G	A	Z	E

MADE IN 30 HOURS BY VIOLET
GUDIANSKY

INFINITY LOST

made in 3 days for the GMTK game
jam and for Jumpstart

lost in a infinitely looping space
shuttle, our protagonist John
Loop has to escape his
unfortunate circumstance.

ITCH

BIT

repo demo

trout

it's a chess engine™



Nosrep (17, USA)
Tracked hours: 173
Untracked hours: 😊

I revived
my chess
engine during
the summer

Written in Haskell,
the greatest programming
language of all time

Almost-good rating! No Bugs

Lichess Blitz: 2223
Lichess Rapid: 2311
Can it beat me: hell yeah

See the code! Play it!

QR code for code QR code for play

Web UI using GHC's
new WASM backend!



This is my third engine and
the only one that's really
worked. It's also been the
most time-consuming (every
time I make a change now, I
have to run the engine for
hours to check if it gains
strength) and technically
advanced (the most search
features, eval trained on 6
million self-play games).

Made it 24hrs by Bolb2019 :3
• Skylar Stein She/Her

Made in 3 days for the GMTK
(and Jumpstart)

One More Day

You're a detective trying to solve a case,
when the day's start to feel very similar.
The days are repeating, but this looping
came just in time to help
finish the case ...



QR code for demo

Demo Link

QR code for repo

Repo Link

Flourish

by Junya (18, UK)

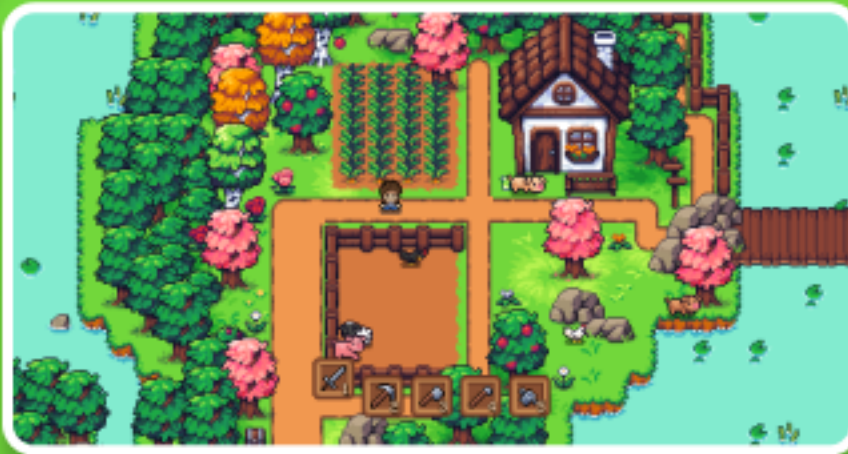


A languageless exploration game
that anyone can play

get your own sticker :D

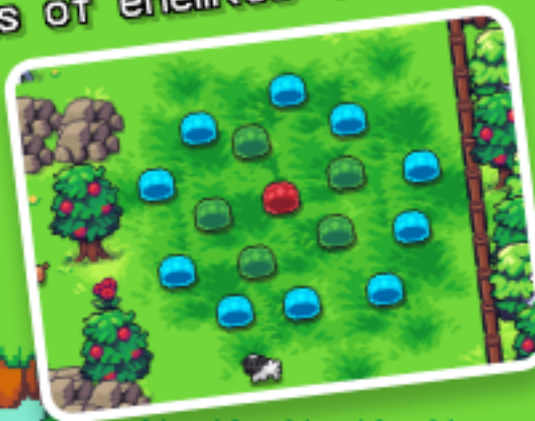


a whole world to traverse



made in
godot engine

tons of enemies to battle!



resources to gather!



many landscapes to
explore!



play now



source code

UNFAIRCRAFT

A Minecraft mod that makes the game **UNFAIR!!!**
NIGHTMARE MODE included

- Combat is... different 0.0
- Your legs are on steroids – ever skipped leg day?
- Spelunking adventures might take longer teehee
- Chests get hungry. Don't trust them with valuables
- Anvils are run by EA. Expect microtransactions
- Minecarts are sentient
- And MORE! You'll notice eventually :p

"so unlucky!"

"feelin'
combustible"

"I'm owned
"feed me..." by EA"

Too expensive!

source code



Available on [Modrinth](#)

Available on [CurseForge](#)

made with <3 by Junya (18) from the UK



a cool guide to get
started!

more tools!

source code



Available on [CurseForge](#)

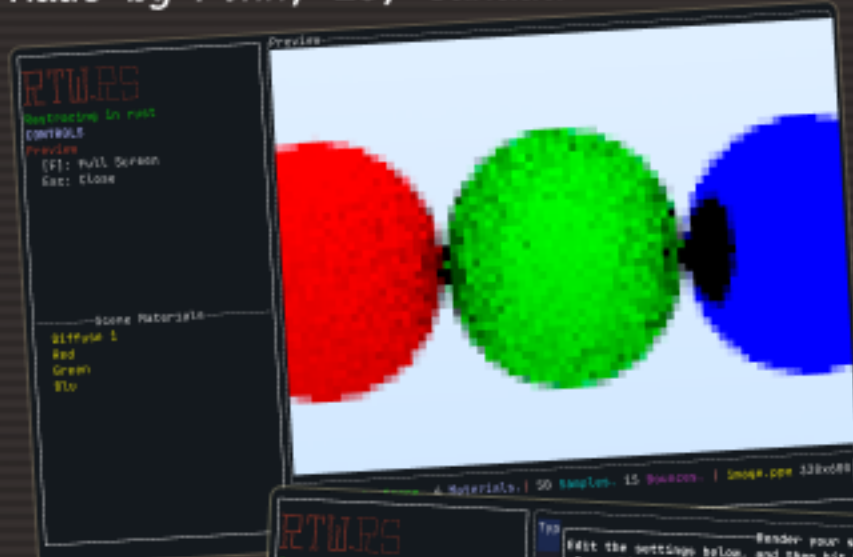
Available on [Modrinth](#)

A Minecraft mod that adds a variety of new weapons

ARSENAL AND ANVIL

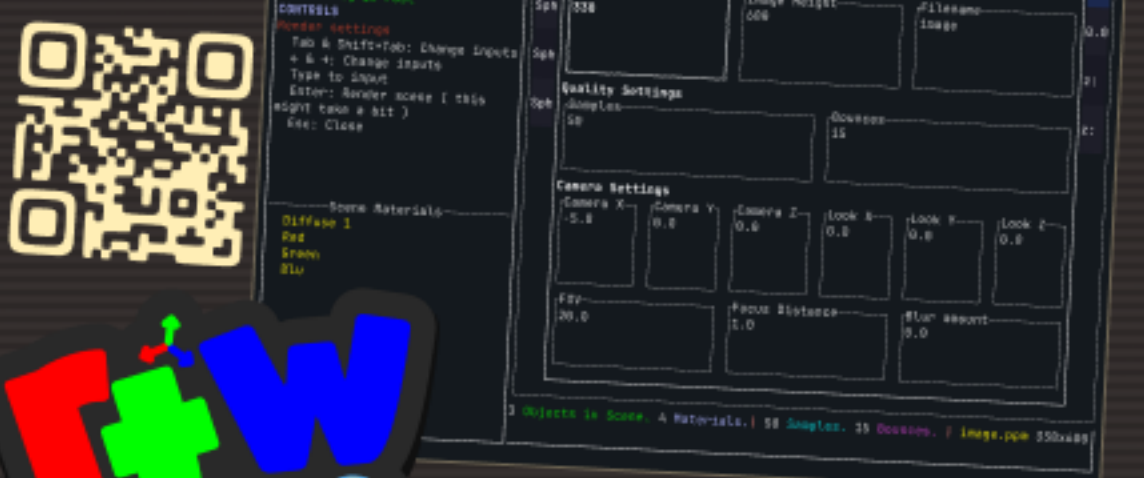
crit chance
reach
apothic attributes
and effects!
armour piercing
attack damage
knockback
attack speed
crit damage
life steal

Made by Finn, 16, Canada



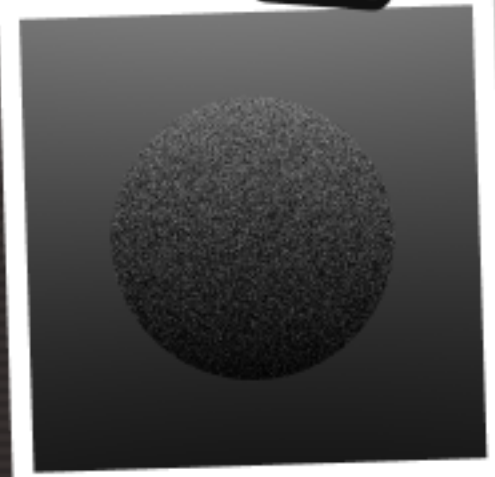
```
Minimal usage example
use rtwlib::Camera, hittable::HittableList;
fn main() {
    let mut world = HittableList {
        objects: Vec::new(),
    };
    let mut cam = Camera::new();

    let image_bytes = cam.render_to_bytes(world, 1);
    progress::println!("Progress: {}%", progress);
}
```

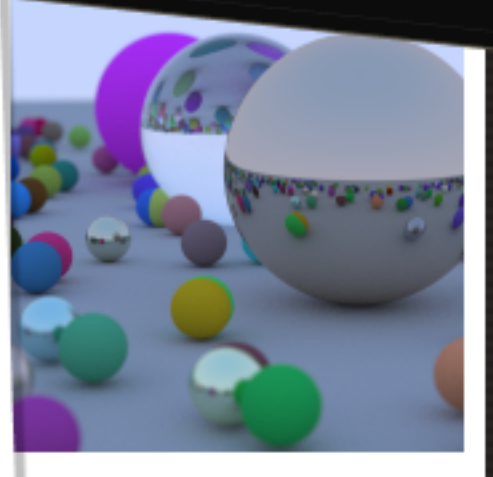


An app that lets you compose, preview, and render raytraced scenes in your terminal! Built with ratatui and rtwlib.

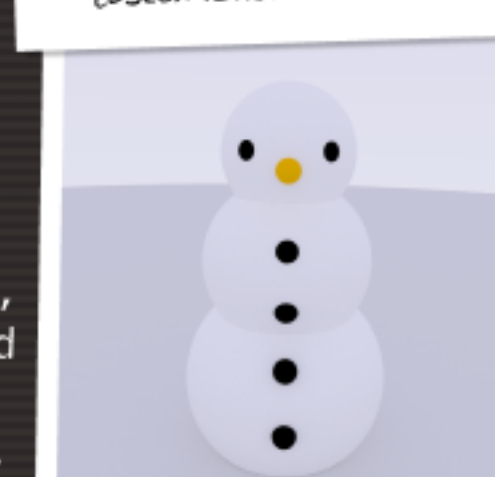
try it out! `cargo install rtw-tui`



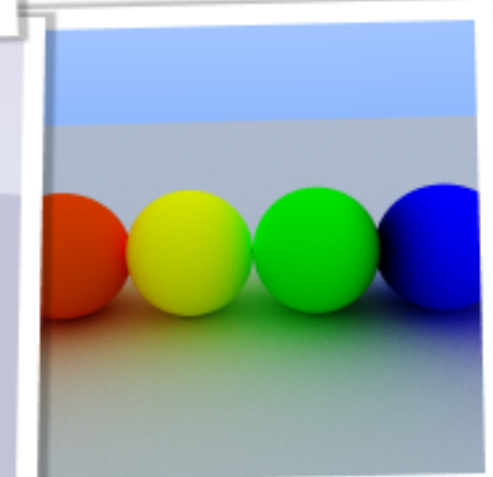
customizable renders



depth of field



simple to use



multiple materials

ShibaRunner

made by Rafa (16, Germany)



Meet new Characters!



ShibaRunner was my first game I ever made in Godot. At the start, I used an asset pack and I learned Godot with a YouTube tutorial. From there, everything went really fluent and most of my Godot knowledge is learning-by-doing-based! ShibaRunner features a nice little story, as well as custom characters and cool sound effects! In the end, my ~150h of work got me a ticket to Tokyo, Japan with Hack Club!



Scan to play!

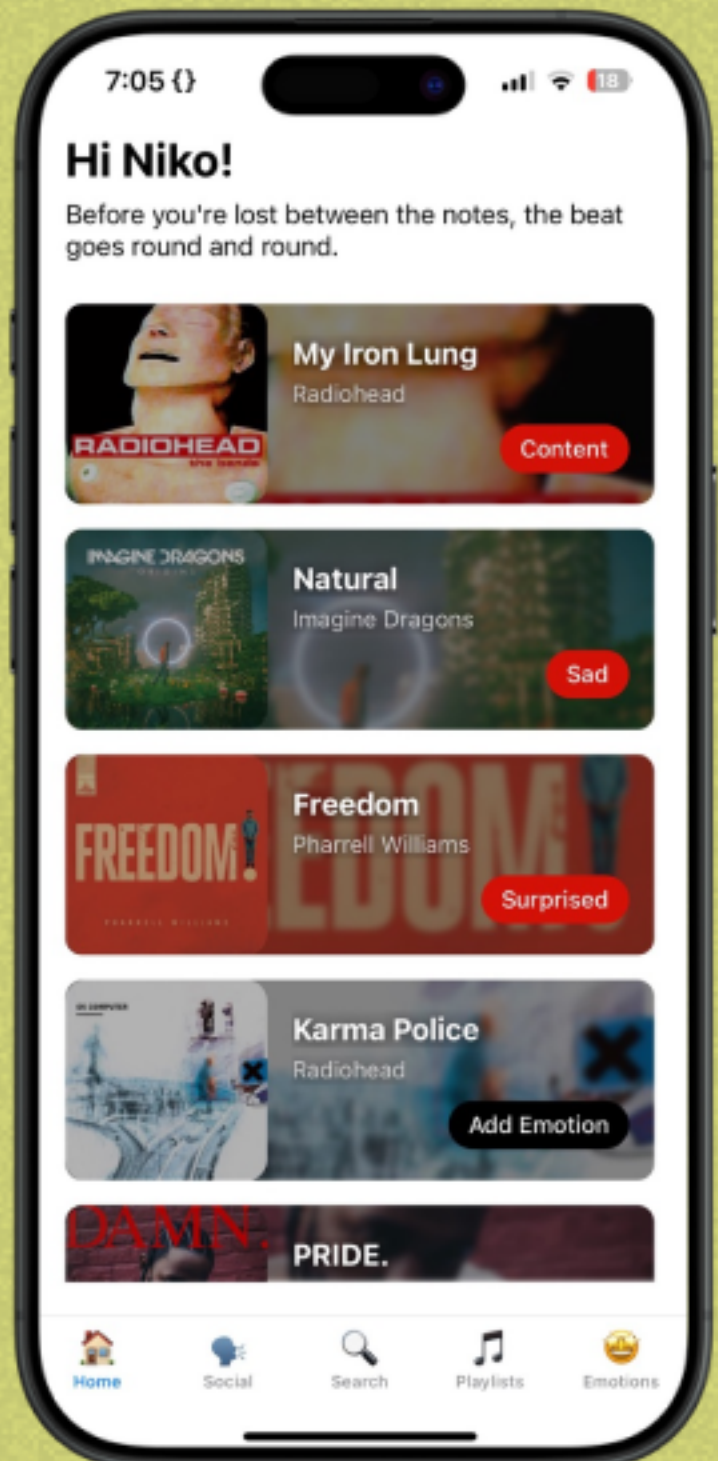


MusicMap.

Imagine a world where your music library doesn't just remember what you played. MusicMap remembers how it made you feel. It lets you tag songs with emotions, then turns those feelings into playlists for any occasion.

Scan to view GitHub + Demo!

Made with ❤️ by Niko Purdie
16y/o Auckland, New Zealand



The Birb

By The Rainy Parakeet, 12 USA

The Birb is a platformer where a birb tries to collect candy for the winter.

Made in godot, and all art was made by me :)



This was made for Jumpstart V1 and 2! I actually didn't plan for it to go this far, but people liked the game so I kept working on it.

Play on itch

GitHub

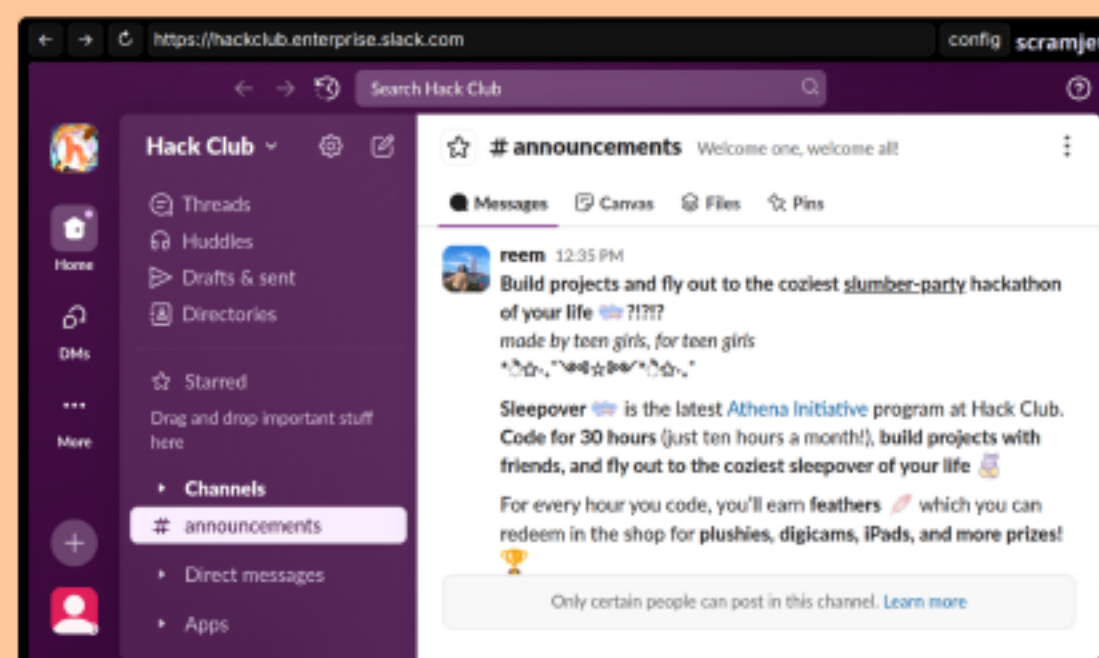




Built by:
Toshit C, 16 
(@r58Playz)
@velzie
@Perclsol

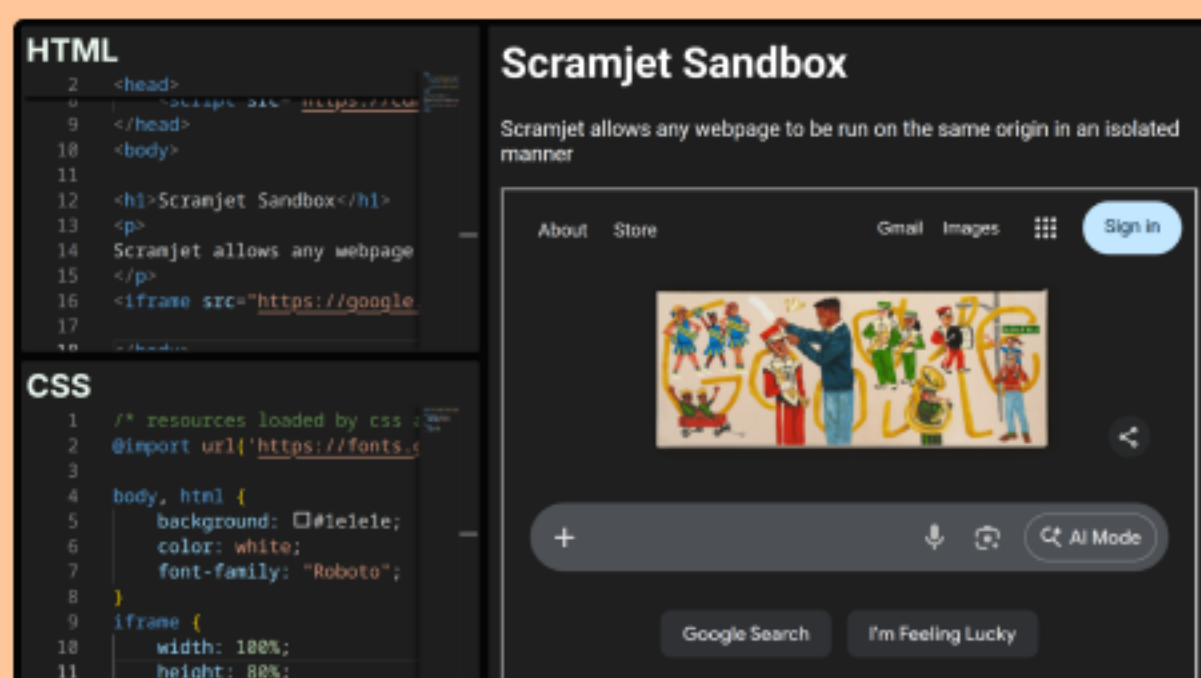
Access blocked websites with just your browser

Scramjet uses a custom end-to-end encrypted TCP socket protocol to send requests, bypassing blockers while staying secure



Sandbox and introspect other websites

Scramjet acts like an iframe without restrictions, allowing anyone to embed and modify any other website



Technical info

- Support for popular websites like YouTube, Discord, GeForce NOW
- Partial support for antibot measures like the ones in Google login
- Oxc/Rust/WebAssembly based rewriting to sandbox JavaScript source code
- Request interception via ServiceWorkers



Used by



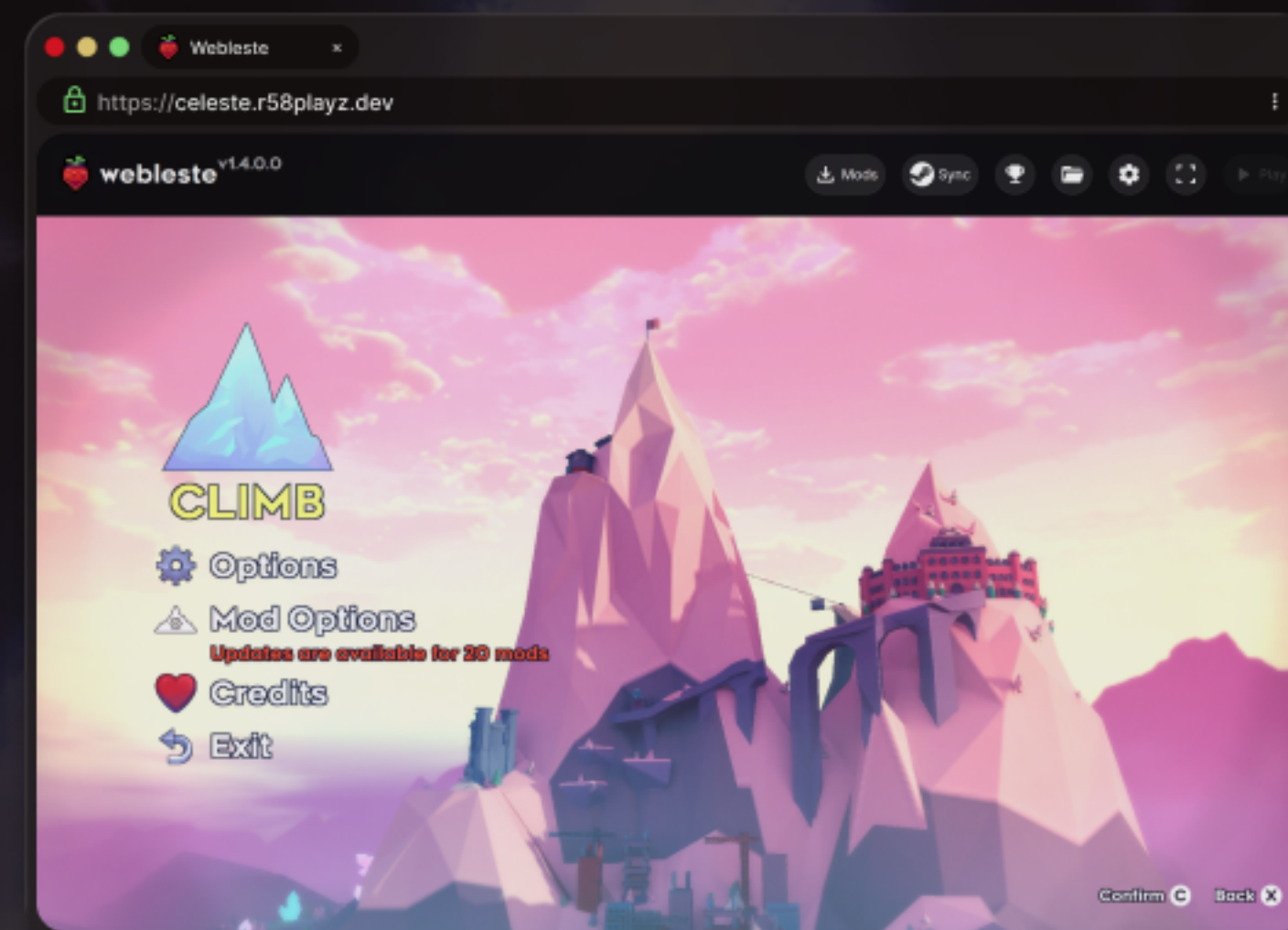
to unblock itch.io

itch.io frontend
built by
@foxmoss 



webbleste

By: Toshit C (@r58Playz), 16 
Hariz S (@bomberfish), 17 



Play Celeste with your favorite mods anywhere!

Webbleste is a full port of Celeste (2018) to the browser with WebAssembly. It features:

- **Full Everest mod support:** So you can play the game with all your favourite mods, including the massive Strawberry Jam mod
- **Multiplayer via CelesteNet:** For having some good fun with your friends.
- **Portable Saves:** In case you want to take your save file to another computer.
- **A wicked-sick web frontend:** Designed with love, and built with dreamland.js.

Some more technical info:

- **Just-In-Time compilation** of mods for a smooth experience
- **Mega-cursed Mono runtime hacks** like completely disabling .NET security and custom IL tokens
- **Custom TCP-over-WebSocket protocol** to enable multiplayer and the ability to download mods from the frontend itself



A QoL-focused extension for Flavortown.

SPICETOWN by Sabio



Adds themes, project gallery improvements, and more!



We Present... **Two**
Flavourtown Extensions
by Sabio & Gizzy respectively



Logpheus

Built to share your Flavortown devlogs to your community



flavortown.hackclub.com/projects/1865

rustytime



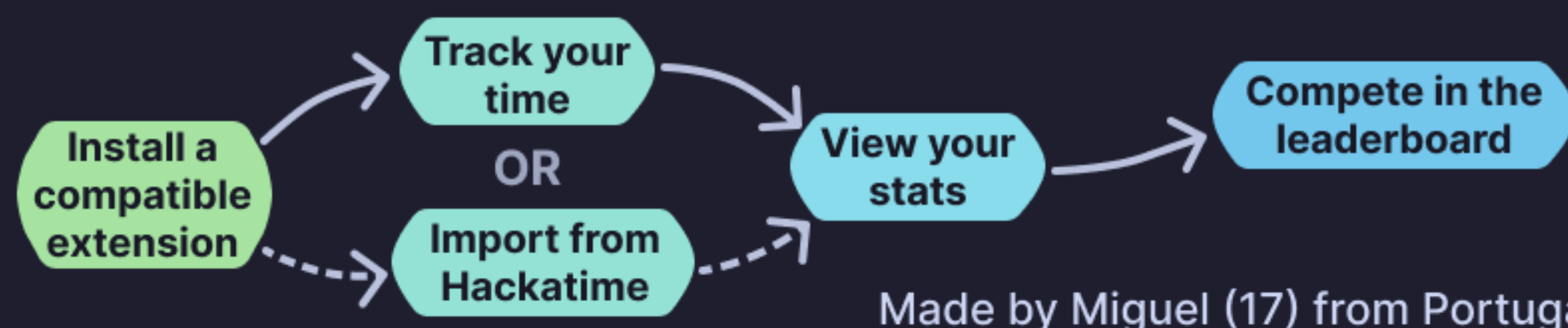
Open source, WakaTime-compatible, self-hosted time tracker for your coding time!



Try it out!



GitHub



Hacktime Heatmap

Easy to use Hacktime coding activity heatmap for your profile!



Very Cool™

SVG Generation

Looks great on your README



Try it out!



Check it out on GitHub!

Made by Miguel (17) from Portugal



<https://lraj22.xyz/tcm>

Bubble Network-hc

By **Danny** (18) & **Rowan** (17), U.S

Over **6k** people are on Bubble Network and are connected to **300+ bubbles.**

A website that lets you visualize how connected you are in slack.

Public Endpoints

```
GET /api/supabase/cache?id=  
GET /api/supabase/network?id=  
GET /api/render?id=  
{ return: image/png }
```

Back End
- Supabase
- Vercel + JS

Front End
- Svelte
- Tailwind
- Canvas API

Repository

Website (try it!)



Web Features

- Search Function
- Leaderboard
- Visualizer Config

Orbit

made by **Evan P**
(15yo, England)

Orbit is an iOS app built primarily for locating the ISS, but also comes with other various space-themed goodies!



GitHub repo



Demo video

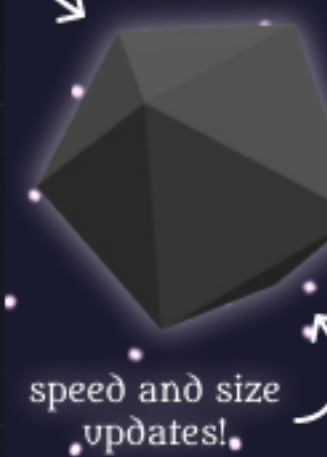


Originally made for Siege, it took roughly 10 hours, and earned 48 coins. It features an ISS tracker (of course), as well as a list of people currently in space, space jokes and facts, a spacebar clicker, and a blank space (notepad) to write on!

Asteroid Watch

made by **shreya c.**
(16, usa, texas)

spinning
asteroid meshes
made with
Three.js!



speed and size
updates!

turns red if
potentially
hazardous!



a website built with
React, Tailwind CSS,
Three.js, and NASA's
NeOWs API :D

carousel displays info
for each asteroid!



website



github repo



complete with randomized iris
stickers! collect them all
before they vanish :p



made by **shreya c.**
(16, usa, texas)

classiflower

This project was my first deep-learning model, and I trained it to classify Iris flowers by processing four botanical measurements - sepal length, sepal width, petal length, and petal width. The architecture includes two hidden layers with ReLu activation, batch normalization (for stable training), and dropout to prevent over-fitting. Trained with the Adam optimizer and early stopping, Classiflower achieves strong generalization on unseen data.

setosa



versicolor



virginica



Sinusonic

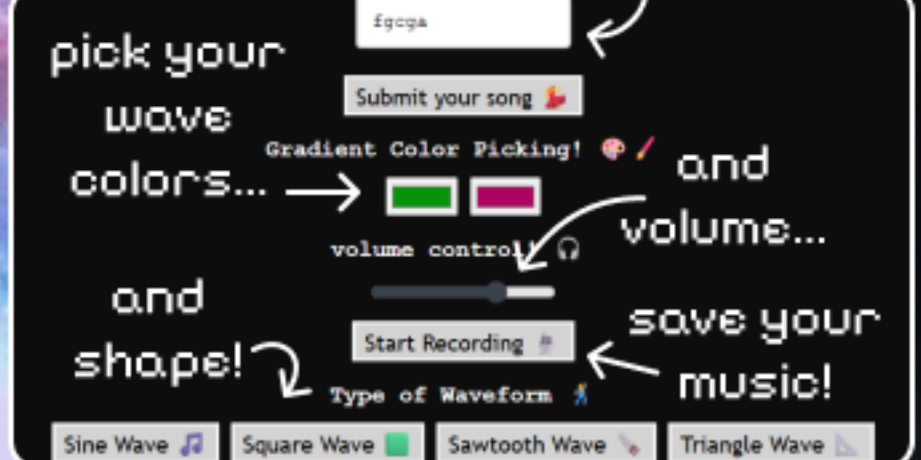
made by **shreya c.**
(16, usa, texas)

turn your music into
colorful math-art



enter your
notes here!

hmm... is there a
secret page?



Hexecute.

Launch apps by casting spells!

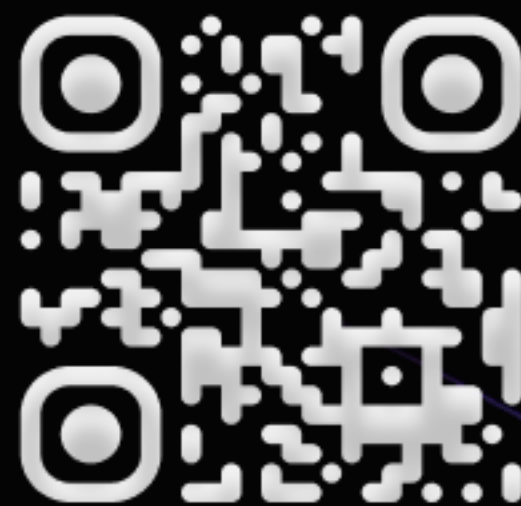
m. GLSL shaders. Wayland-native. 6+ parameter animation. Top
Apple-inspired design. Automatic gesture learning. Performance



swaylock
vicinae notify-send hyprctl dispatch exit
steam ...**commands out.** obs
wl-copy htop firefox -foreground
kitty --start-as fullscreen

Design your own gestures!

Try it out!



\$1 Unistroke
Recognizer algorithm
for matching gestures



OpenInk

e-Ink project inspired by TRMNL that shows customizable "screens" (website renders) on any e-Ink display, letting you customize when and how each one of them shows, as well as authenticate with apps like Home Assistant to show screens that would need authentication.



All made by @Zoe! (16, Spain)

h HC Wrapped

Your year in Hack Club, summarized! Access your top channels, see your message count, Hacktime hours, top channels, and more! You can also enable private mode to only see public data :)

TOTAL MESSAGES

12,135

HACKTIME

330h

HABITAT

#midnight-cabin-plans

SHIPPED

7

BESTIE

@Jan Ptaszek

META MSGS

PROX2 MSGS

17

CONFESSIONS MSGS

868

Dimensity

CLI-over-CLI tool, powered by JS, that runs on Linux and MacOS. It shows error descriptions, supports custom autocompletion, lets you set a custom username... An interesting experiment.

Starting Dimensity...

Hey, welcome to Dimensity! 🙌
May I... know your username? Please? :D
This will be displayed the CLI prompt.

Enter your username: zoe
ce to meet you, zoe! You're all set.
u can type "dimensity help" for available commands.
e@dimensity:~\$



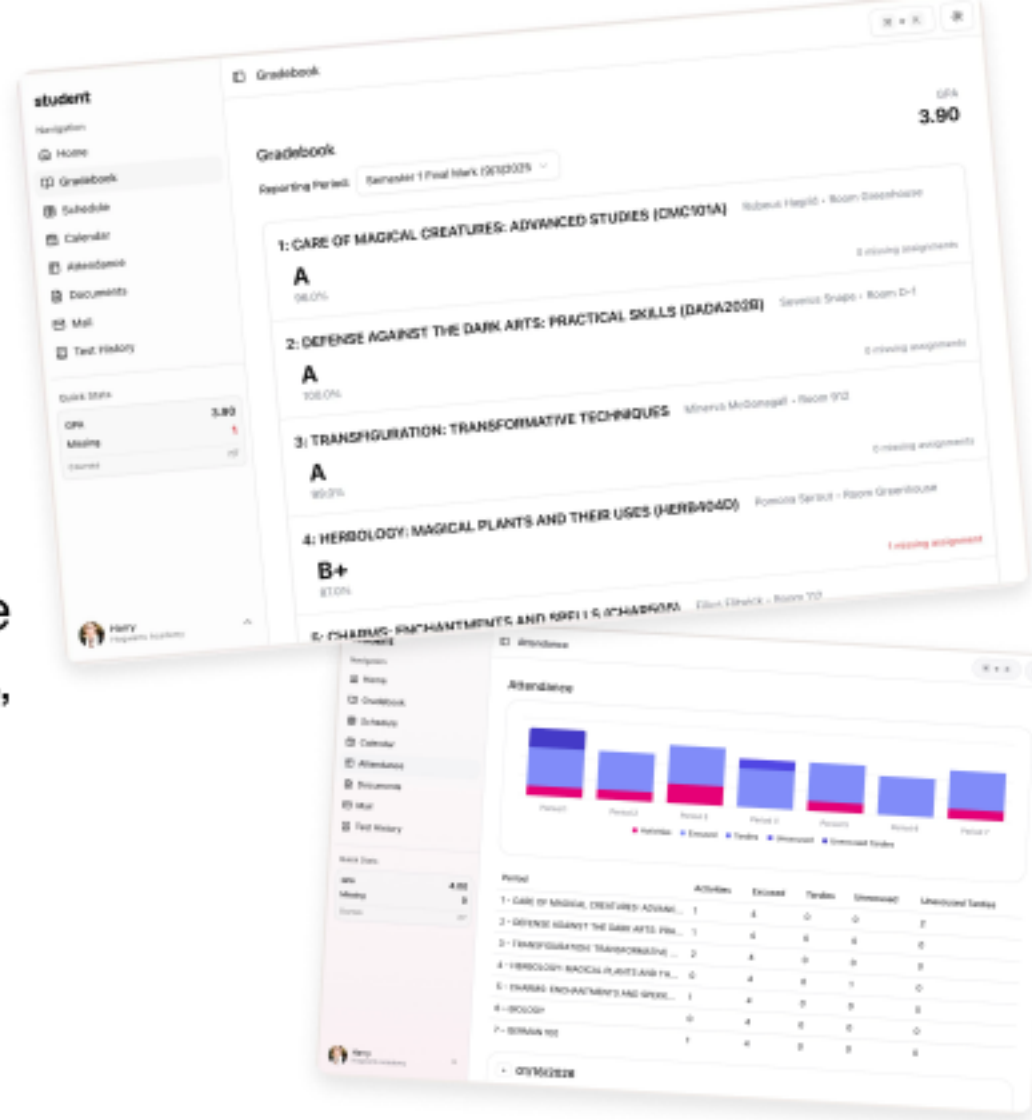
student

By Aram Shiva (15) from
🇺🇸 Seattle, Washington

Schools have been using digital grading since the 2000s, but the innovation for these apps have stopped in the 2000s. Clunky UIs, slow interfaces, and an unpleasant experience.

Student is made by reverse engineering the endpoints of popular gradebook app Synergy (known as StudentVUE), a popular digital gradebook tool used by schools. It makes a cleaner and more pleasant experience, taking over 60 hours (and countless nights).

StudentVUE® is a registered trademark of Edupoint Educational Systems, LLC. This project is not affiliated with Edupoint, or Synergy.



Check out the [GitHub!](#)

Student? Check it out!



Ali's page of projects

Powered by Windows Vista: The "WOW" starts now!

Peek is a command for your terminal

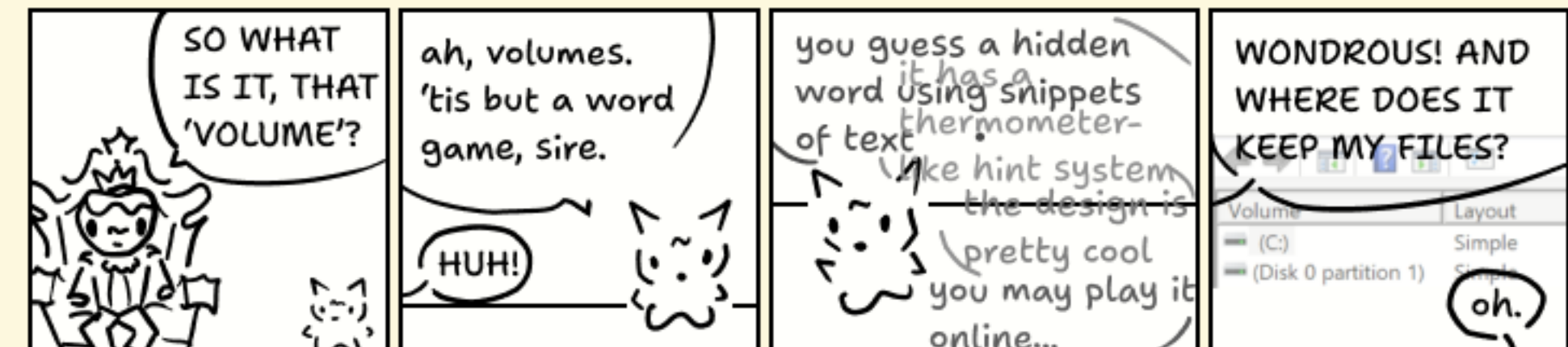
hs7t/peek



YOU EVER GOT NO CLUE WHAT'S IN A FOLDER?

YEAH, SAME. WITH THIS, YOU CAN JUST TYPE "PEEK" FROM A DIRECTORY AND GET A NICE TABLE WITH A PREVIEW OF EVERY TEXT FILE IN IT. IT'S LS FOR WHEN YOU HAVEN'T TOUCHED A PROJECT IN HALF A YEAR.

P.S.: THERE'S ALSO A FEW COOL FILTERING FEATURES, LIKE FUZZY SEARCH AND GLOB-LIKE FILTERING. AND IT TAKES NO TIME TO SET UP. HEY, DOWNLOAD IT. DOWNLOAD IT—



Play **Volumes**! It's a simple wondrous game where you guess a word using up to three unrelated text snippets sourced from all over the information superhighway.

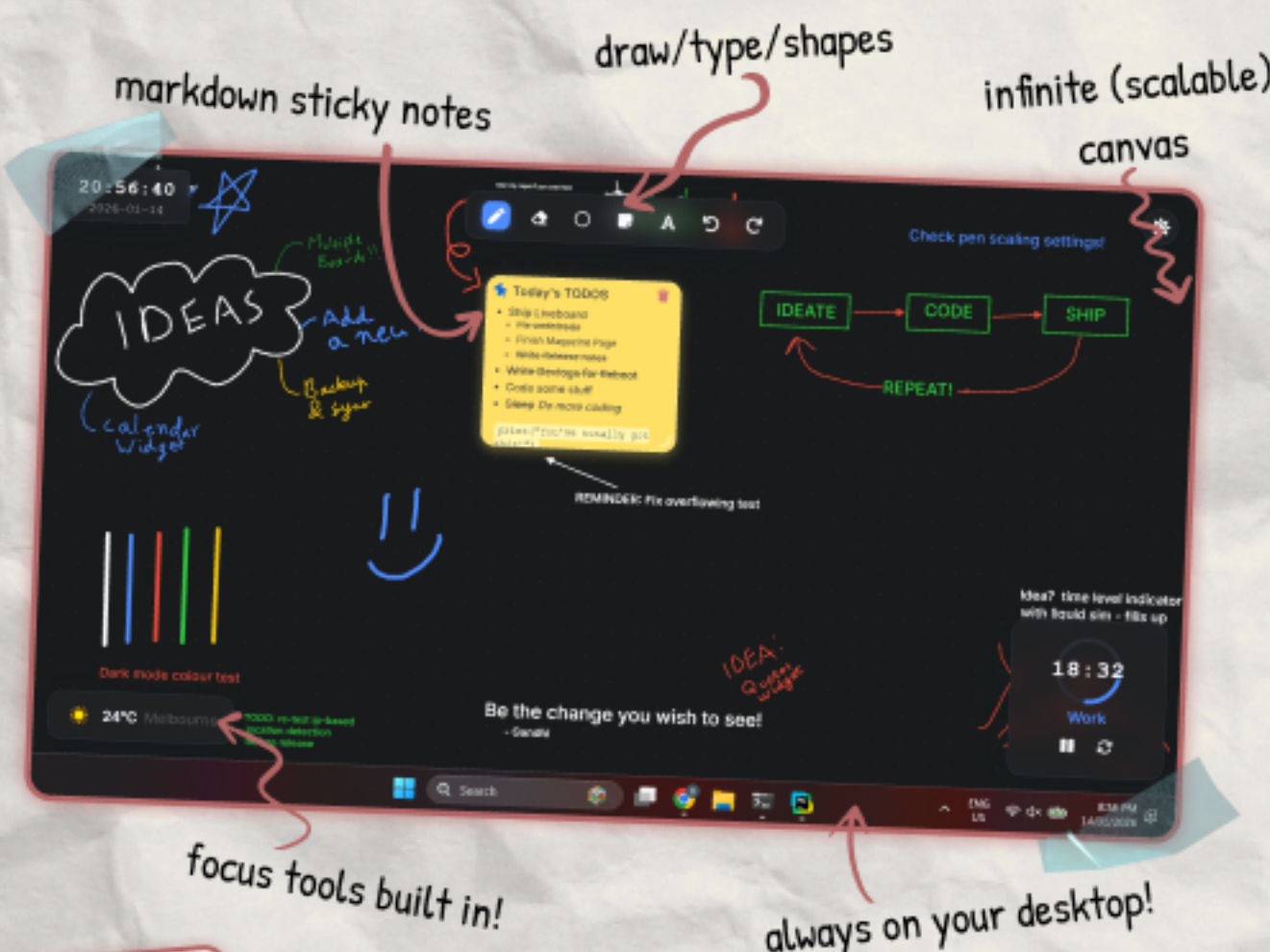
The base game was made in around a month, with some 25 hours of coding time. It's been thrilling to work on, and I've learned a lot throughout!



volumes.hvii.cc

Liveboard

a whiteboard that lives on your desktop!



\$ cat README_Programmer_Debates

```
$ cat ABOUT.md
> A README section poses
> a controversial programming
  question
> visitors vote on the matter
> a live vote count is shown
```

```
$ ./start-debate.sh
> debate: tabs vs spaces
> votes: 6-14
> status: awaiting vote...
```

\$

Programmer Debate

Is Git Rebase or Git Merge better?

Vote

Git Rebase

Git Merge

Here's what the internet thinks!

Git Rebase

Git Merge

Made with ❤ by MadAvidCoder

Nutmeg produces some pretty alright colour schemes.

It uses simple colour theory —lightness/chroma/hue variations, complimentary/analog schemes— and the Oklab space (partly) to get you to a nice starting point. It's not the best palette tool. But it is pretty alright.

Like the one in use here.)

Hello! I'm Ali (16, Colombia). I made the projects in this page! I joined Hack Club recently; it's the coolest thing ever, and I'm super happy to be here!

The OFL-licensed fonts Avara, Shantell Sans, Unormative Fraktur, Ptolemy Great-Primer 18, Authentic Sans, Courier Prime, and Jost are used in this page. So is Wikimedia Commons Magnifying glass.jpg (Tomomarusan, CC Attribution 2.5). Huge thanks to the authors for allowing everyone to use and modify their work. Find hs7t/peek, hs7t/volumes, and hs7t/nutmeg on GitHub.



The LD Nano Team 2025 Presents:



7 highschoolers, 4 months,
1 box of industrial tech;



Built with:
PLCnext TechnologyTM

"a PLC (programmable
logic controller) is
an industrial
computer."



Demo Videos, Source
Code, 3d Files, Logbook,
Bill of Materials & More!



- O:FN is a life-sized, interactive installation supporting community outreach with:
- 11x school-themed pieces
 - complete card and turn-based
 - conductive 3d-printed cavity-tong circuits
 - audiovisual FX (board & cavity lights, sounds)
 - 2x touchscreen panels w/ live scoreboards
 - proximity-sensor piece detection
 - captivating haptic feedback tongs
 - single and multi-player modes



Big O's
Loop Lab

★ Walk



▶ On Start



Play on:



MatManna@HACKCLUB:~/game\$ Learn computational
thinking through algorithms, loops, and recursion.

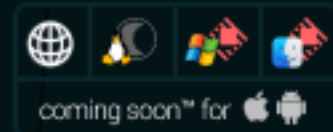
made with
GODOT for GMK23 & SUMMER MAKING

Web Client, Source Code,
Wiki, Comparison Table

Regreso



Clients available for:



built with <3, &
T3 N by mat (17)

- Regreso is a libre tool for storing and finding resources and files you wish to "return" later.
- "destinations" (resources) & "maps" (lists)
 - "trunks" (workspaces) and archival
 - login w/ email or oauth & 2fa w/ webauthn or totp
 - llm-powered auto-tagging
 - documented rest api
 - raycast desktop extension client
 - posthog analytics

ahoy! I'm Mat (17)

& I think that it's past time that music hardware companies

FACE THE MUSIC

for anti-consumer and anti-environmental behavior¹

With **Bender**², we're doing that by crafting tools
which empower developers and musicians to
LIBERATE their proprietary amplifiers and finally
control their own gear.

View on PyPI



LtAmp.py

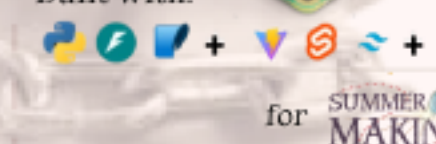
is a cross-platform Python module for
interacting with LT amplifiers from a
guitar company that rhymes with
"bender" and names gear after horses.

Watch a demo!



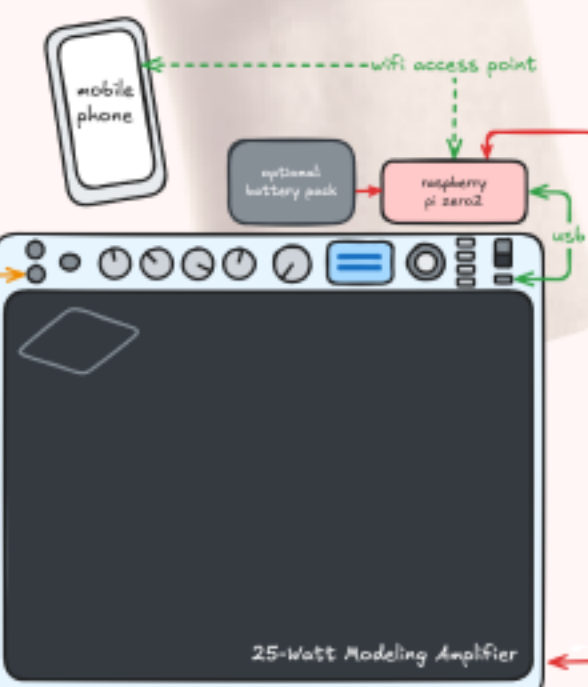
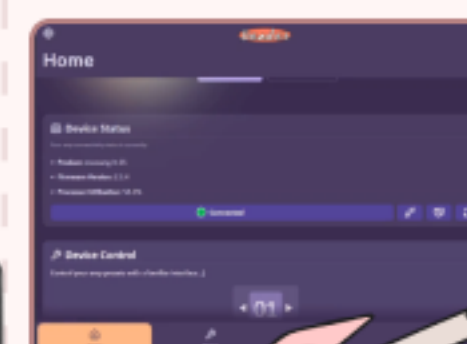
The Twist

Built with:



for SUMMER MAKING

```
orpheus@hc:~/boop$ pip install ltamp
orpheus@hc:~/boop$ python
>>> import time
>>> from ltamp import LtAmp
>>> amp = LtAmp()
>>> amp.connect()
>>> amp.send_sync_begin()
>>> amp.send_sync_end()
>>> for i in range(5):
>>>     amp.send_heartbeat()
>>>     print(amp.request_qa_slots())
>>>     time.sleep(1)
>>> amp.disconnect()
```



¹lookup planned obsolescence, e-waste, and crippleware ² /benderhq to learn more!

TOAD



A really bad web browser that runs in your terminal.

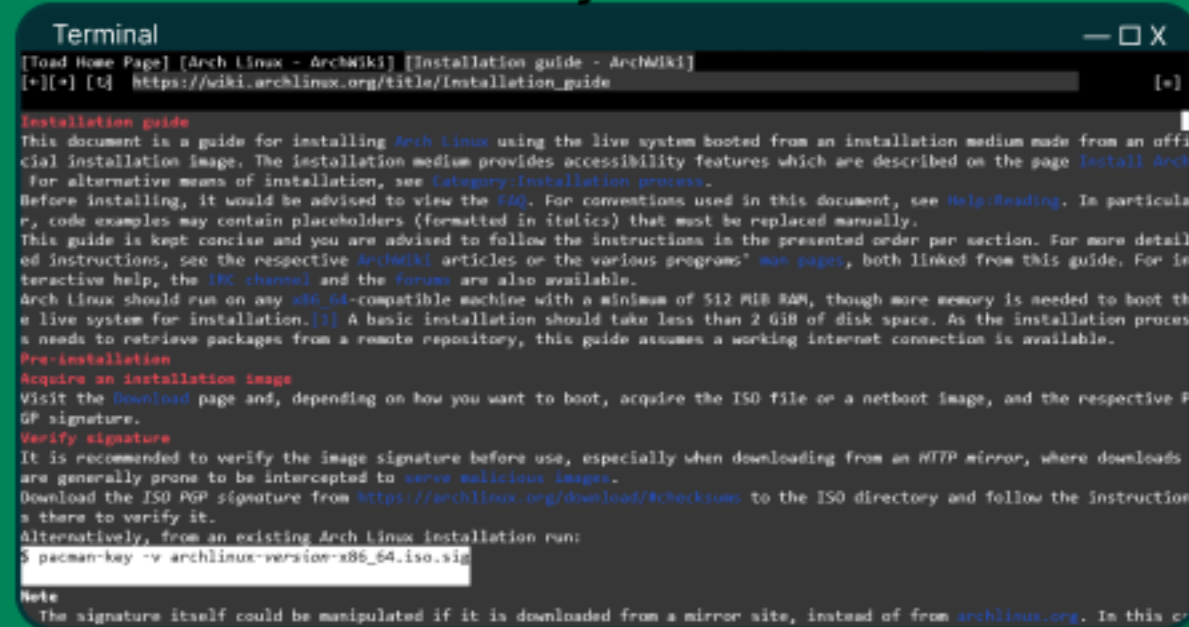
Uses from-scratch written **CSS** and **HTML** parsers!



Made in Rust in ~80 hours by @ingobeans, 17 y.o. from Sweden 🇸🇪

I chose not to implement JS support, but Toad does handle HTML Forms, meaning duckduckgo actually works!

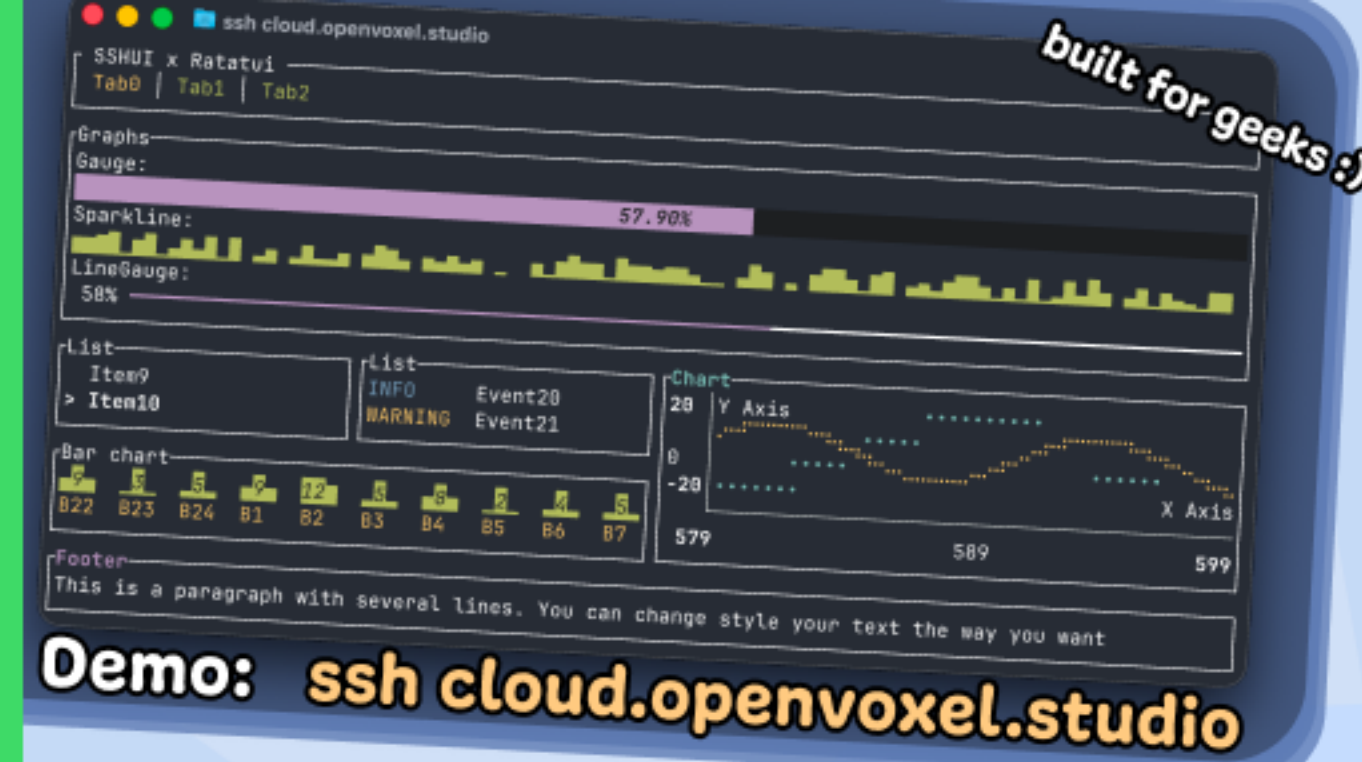
dark mode??? in my toad?



woah,,, its duckduckgo

Uses multi-threading for literally everything

Become a Toader today!



> A Rust library to build a terminal user-interface that works over SSH!

Supports auth, frame rates & everything Ratatui contains!



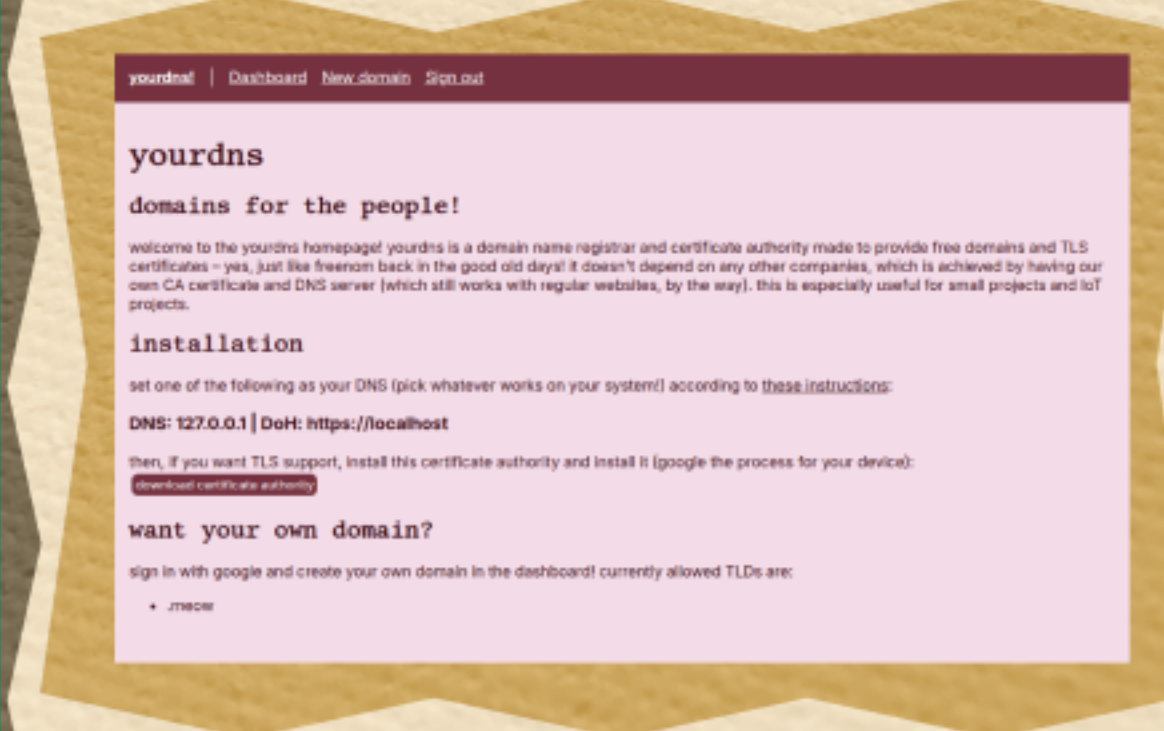
Low performance cost!

Sub-second response times to changes on-screen!

Always know if there's an enemy on screen or on the minimap!



yourdns is a free, open-source domain registrar and DNS server that allows people to claim domains and use them for personal purposes or, for example, in their IoT projects! it is very easy to use AND host if you want to – feel free to check out the GitHub for it! built with Next.JS for HackClub's Summer of Making.



yourdns is a free, open-source domain registrar and DNS server that allows people to claim domains and use them for personal purposes or, for example, in their IoT projects! it is very easy to use AND host if you want to – feel free to check out the GitHub for it! built with Next.JS for HackClub's Summer of Making.

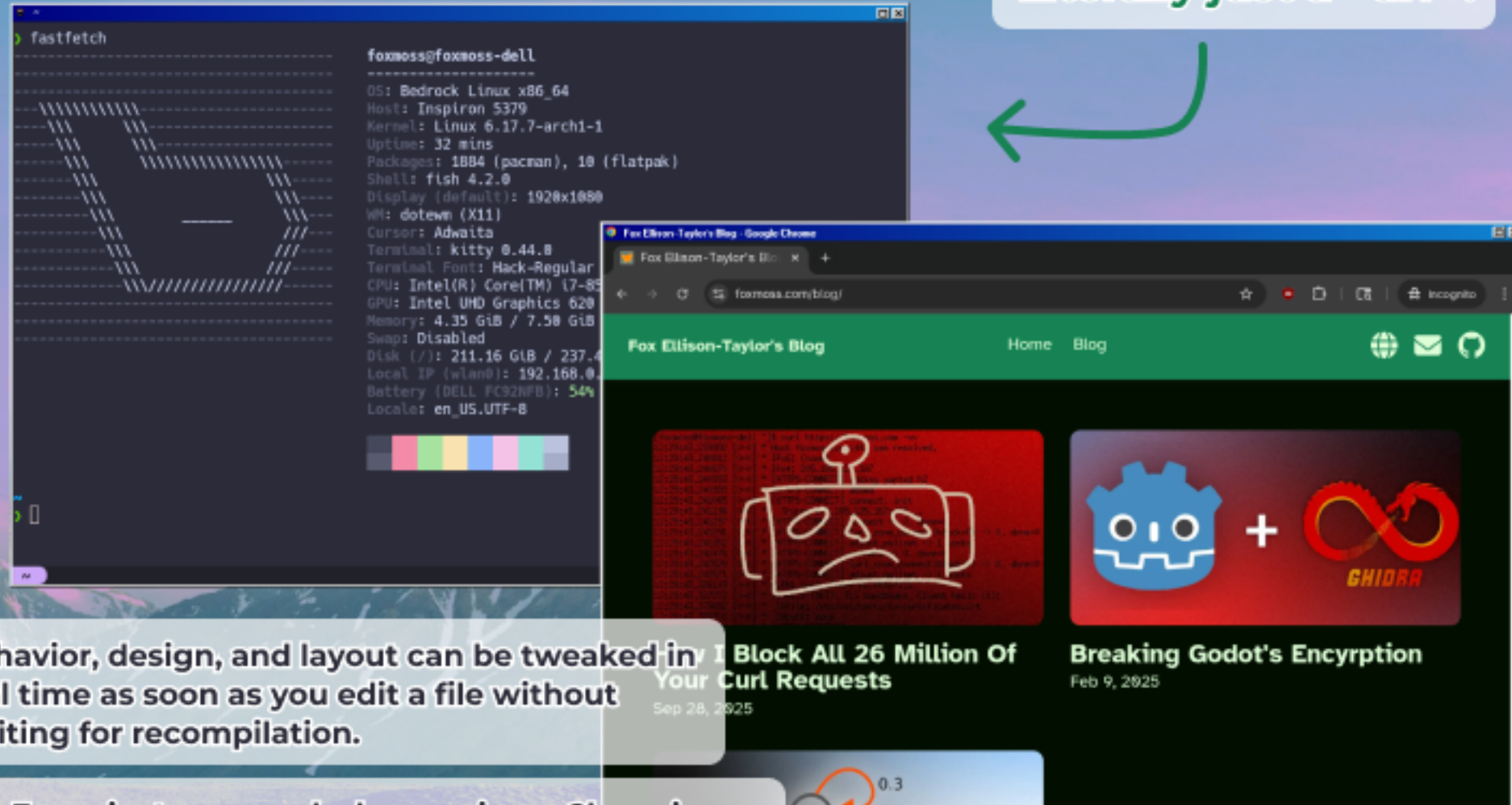
yourdns website service



Dote

Dote lets you write your own desktop environment fully in HTML CSS and JS, abstracting away the low level interface.

Literally just a `<div>`.



Behavior, design, and layout can be tweaked in real time as soon as you edit a file without waiting for recompilation.

Every instance works by running a Chromium instance that has a communication stream open with the lower level application actually displaying the content.

The framework renders all windows to textures which are then composited in OpenGL. This lets the designer to put desktop elements in the foreground (like popups) and wallpaper in the background between your application windows, all while content is managed by a single web page and only one browser.

Written over the course of 65 hours by Fox Ellison-Taylor a 16 year old from Minneapolis, Minnesota

More technical details on my blog!



GitHub



Blog



Seems normal, till the board starts SLIDING

A twist on classic tic-tac-toe where the Xs and Os shift every turn, creating deeper, more strategic matches.

github.com/wroug/rotatetoe

ROTATE TOE

Made for Flavortown!!

Hail I'm Karl, I'm 13 and I'm from Estonia

Singleplayer Multiplayer Quit

JustABouncingBall

Made By: 4.Square / John Shalom, Fifteen y.o. From Brisbane

JustABouncingBall is my personal recreation of Pong. This is my third ever Godot game and I really enjoyed making it! The reason why its called JustABouncingBall and not Pong is simply because Pong is Copywrited.

Itch.io Link GitHub Repo

Made For Hackolub Milkyway

tonic minor second major second minor third major third perfect fourth tritone perfect fifth

By Shambhavi, 17 y.o. from the UK

tuning systems

This project compares the different types of tuning systems: Pythagorean, Just Intonation, and Equal Temperament. It creates the fractions needed for each interval in each system from scratch while explaining how each system works. You press the buttons at the top of the site to play a note + show it's frequency, and you can select which tuning system you want that note to be played in!

It's inspired by Piano Tuning and Continued Fractions by Matthew Bartha, an article I found while researching the real world applications of continued fractions. Plus, I wanted to merge my passion for maths and music!

minor sixth perfect fifth

REPO DEMO

minor sixth major seventh

tritone perfect fourth perfect third major third minor third major second minor second tonic

created by lynn, a 16 year-old hackolubber from new york >w<

aftonsparv

a better way to view hackatime

site repository

Should be viewed on desktop Built with SvelteKit and hosted statically

A UI to more easily view hackatime statistics from the API for users holistically, per project, or for multiple projects combined. Also provides shareable links.

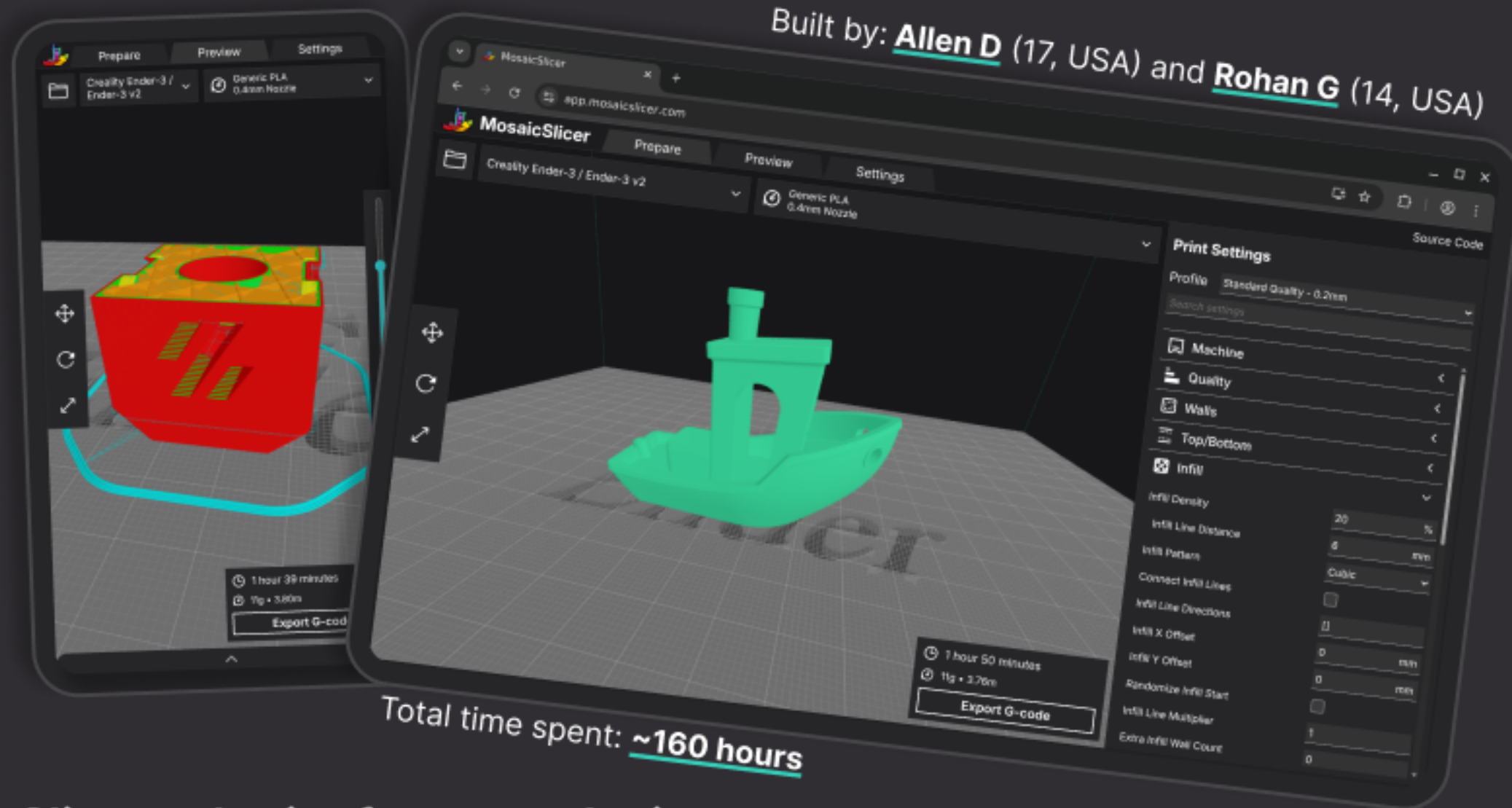
Primarily created for Hack Club program organizers to review submitted project coding hours. Can be used by all.

Check out this project (Aftonsparv) on Aftonsparv!



MosaicSlicer

A browser-based 3D printing slicer



Slice and print from any device

Supports all desktop and mobile browsers

Fully featured

Contains a G-code viewer and tons of print options

Completely private and free

Your models and data never leave your device

Compatible with hundreds of printers

Works with all unmodified Cura profiles

Technical Overview

We use a WebAssembly port of Cura's slicing backend (CuraEngine) combined with our own profile loading and frontend to give the same reliability as Cura with a responsive and portable web interface. We dynamically load Cura's builtin profiles, models, and more to provide performance without sacrificing capability. To ensure compatibility with Cura, we rewrote Cura's profile system, and used a MicroPython web-port to support dynamic expressions and macros.

The 3D viewer is written with `three.js`, and is highly optimized to work on low-end mobile devices and Chromebooks. We also parse generated G-Code to provide a labeled layer-by-layer preview. The whole project is written in Vanilla Javascript to minimize the bundle size, load times, and overhead.



Live Demo

GitHub Repo



Originally made for



Filatrack

The unorganized spreadsheet killer!

Filatrack is the simplest way to track your 3d printing filament.
No ads, open source, free forever.

Source Code!

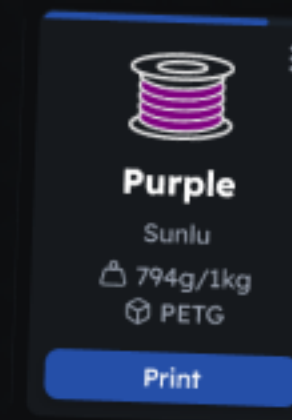


filatrack.app



Join 500+ other users already tracking 4,000+ rolls of filament!

Whenever you print with a filament, open Filatrack and press "Print" and enter how much filament you used! Filatrack will crunch the numbers for you and show you how much is left!



I made Filatrack to escape spreadsheets, paid services, and closed-source projects. I hope others may find use in this project as well!

Drew Ratner, 17



72
hardware projects
are in this magazine!

Green Assistant / twoswap / deskmate / celeste-pad / SplitWave / Mito / Pingxel / Lumis / EngiPad / Printer Pi Pro / The Biblically Accurate Keyboard / MacroBoard / Nibunkatsu one / Relic / glyph / stm32pe midi controller / Ultraterm / bit::busy / Dyno / bit::lace / Highlight / Luma / ModuDeck / Ender X4 / ReadGood / Shitty Meta Glasses / Blind Defusal / 404: Drink Not Found / minimaimai / flowerdle / Word Hunter / Spinny Snake 3D / Cuber / Diode Laser Cutter / CircuitCrafter Mini / Astrohacker H1 / Jukebox / Robert the Minion / slider-synth / RPBoard² / PiCat / Bob The Gun / picobug / flappy / Breadboard+ / Tiny4FSK / V3S SBC / PicoDucky / LightWolf 2350 / SmolPad / ESP-32 Devboard / Simple Flight Controller / Trace / Cyberboard / Ember / Athena / Anicept v4 / StratoSoar / TacoCopter / Red-Ryder Rocket / Hyperion Micro / Hyperion Hermes / Christmas light show / RC-Tank / flora / stacked / my first robot / FiddleStein / Toothless / switchpad / clonetroller / bop

hardware projects
are in this magazine!

Green Assistant / twoswap / deskmate / celeste-pad / SplitWave / Mito / Pingxel / Lumis / EngiPad / Printer Pi Pro / The Biblically Accurate Keyboard / MacroBoard / Nibunkatsu one / Relic / glyph / stm32pe midi controller / Ultraterm / bit::busy / Dyno / bit::lace / Highlight / Luma / ModuDeck / Ender X4 / ReadGood / Shitty Meta Glasses / Blind Defusal / 404: Drink Not Found / minimaimai / flowerdle / Word Hunter / Spinny Snake 3D / Cuber / Diode Laser Cutter / CircuitCrafter Mini / Astrohacker H1 / Jukebox / Robert the Minion / slider-synth / RPBoard² / PiCat / Bob The Gun / picobug / flappy / Breadboard+ / Tiny4FSK / V3S SBC / PicoDucky / LightWolf 2350 / SmolPad / ESP-32 Devboard / Simple Flight Controller / Trace / Cyberboard / Ember / Athena / Anicept v4 / StratoSoar / TacoCopter / Red-Ryder Rocket / Hyperion Micro / Hyperion Hermes / Christmas light show / RC-Tank / flora / stacked / my first robot / FiddleStein / Toothless / switchpad / clonetroller / bop





Green Assistant

works with Homeassistant

automatic irrigation

monitors almost everything about your greenhouse



by Felix 18 y.o.
from Germany



made by Nick (17, USA)
for Hackaday Supercon 9

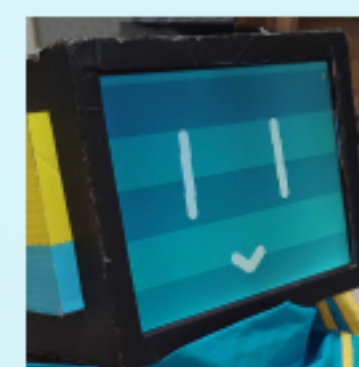


TWOSWAP is a TV-head
and your new best friend.

He's also my first interactive hardware project. I had lots of roadblocks, but being able to interact with others while publicly presenting as him was worth it!



github



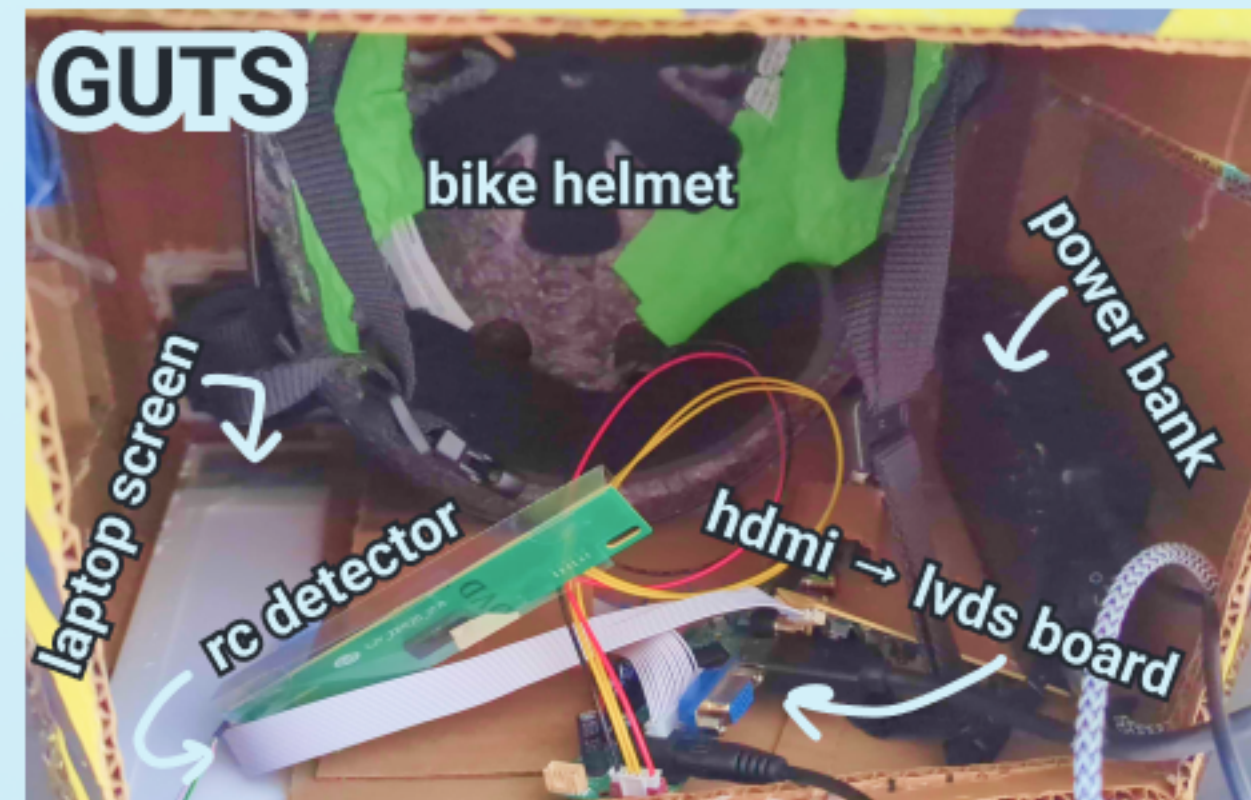
runs **pygame** for custom
→ facial expressions

powered by a ~~pi 5~~ (died)
RPI0 2w.



entirely handsewn
bandana and arm/
kneepads, which contain
an **LED perfboard**
powered by 2x CR2032s

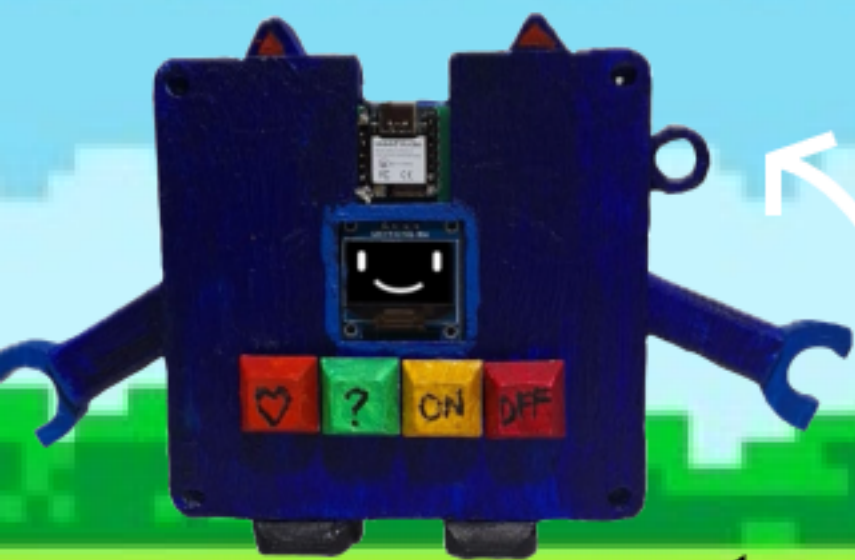
mandatory
aura farming.
thank you nirav!



By Suhansh, 18, Singapore

Meet DESKMATE

Your personal companion For
your late night study sessions!



▶ **PLAYER 1** ◀

comes with a keychain!

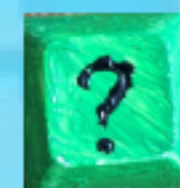
SCAN FOR REPO!



CONTROLS



Show deskmate some love and
watch his Face light up!



Bored? Distracted?
Have deskmate do something
random and Funny!



Start/Stop Deskmate's built
in pomodoro timer!



Reset Deskmate's pomodoro
timer!



by akshara, 17, singapore

celeste-pad



demo



a macropad to play celeste!

features

- 🍓 default keybindings
- 🍓 made with clay and paint!
- 🍓 xiao rp2040 mcu
- 🍓 custom pcb (with strawberries!)

SPLIT WAVE

By Ankush, 17, India

Kailh choc V1 Switches!

btw

Really low Profile!!

MBK Keycaps

Scan For Repo!!

SplitWave is a column
stagger, Fully wireless
split keyboard powered
by SuperMini nRF52840

MITO

Keyboard

- Bluetooth and Wired
- 1 Year battery life
- Powered by nRF52
- Hot swap sockets

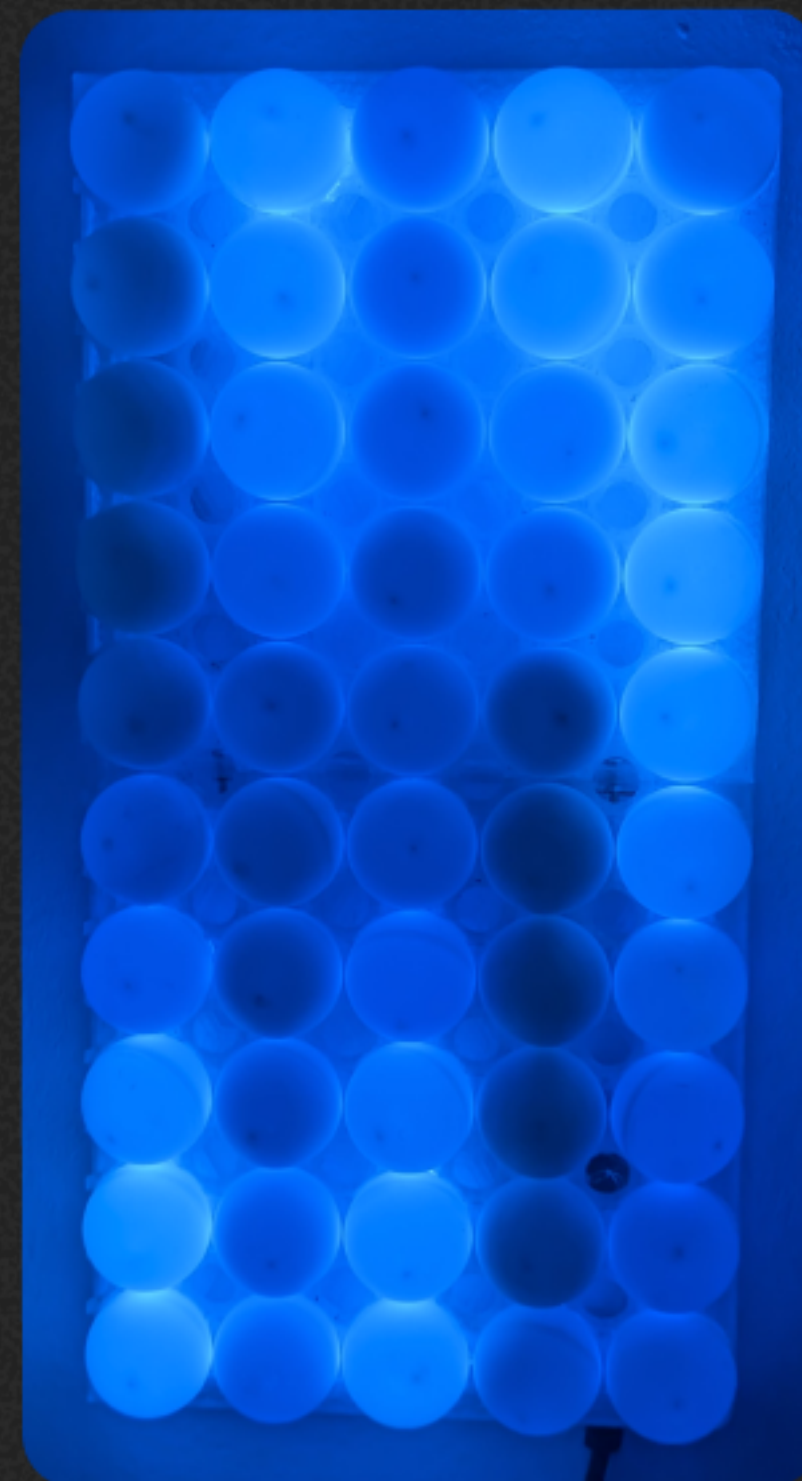


- Ergonomic
- Low profile switches
- Individually addressable RGB

Repo



Marcell, 17, Székely Land



PINGXEL

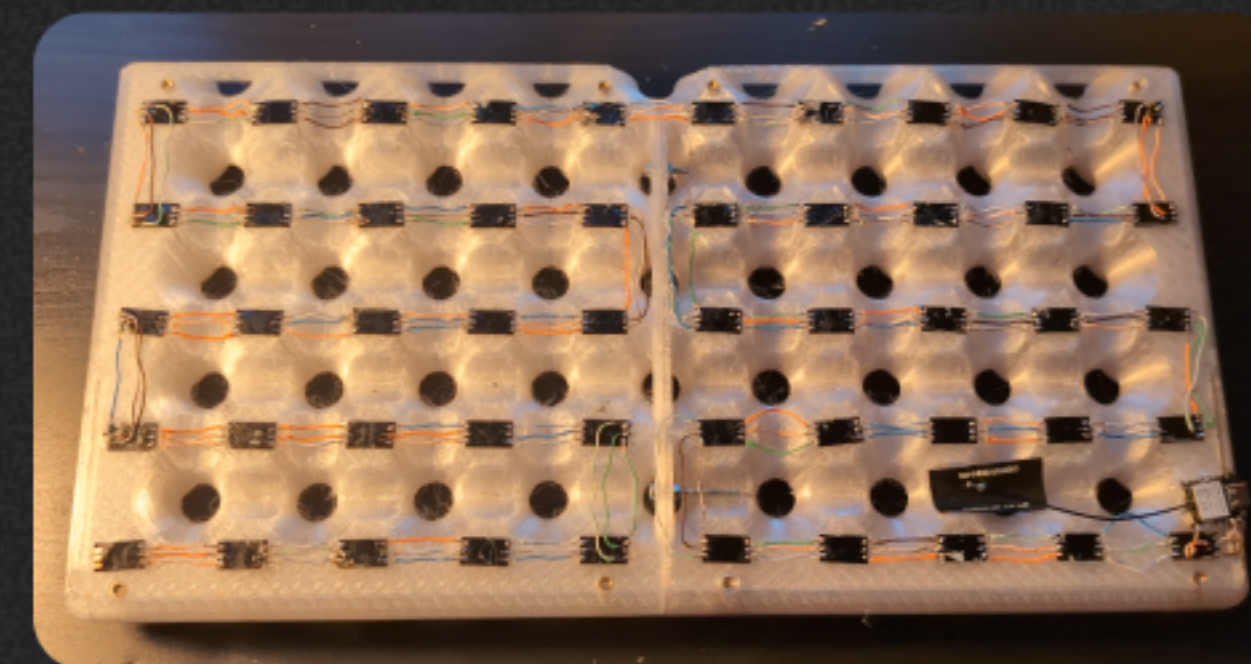
Ping Pong ball LED wall panel

- Ping Pong ball diffusers
- WiFi control
- ESP32 powered
- 300 hand soldered joints

REPO



Marcell, 17, Székely Land



LUMIS

A forearm mounted LED matrix

- 288 LEDs
- 36*8 matrix
- Wi-Fi control
- Battery powered
- ESP32 inside



REPO



Marcell, 17, Székely Land

by Alex Tran, a 15y/o.
from Florida!



HACK CLUB

HACKPAD LOLOLOL
A Highway Picture

Meet
THE

Engi Pad

AN 8-KEY MACROPAD, BASED
OFF OF THE ENGINEER'S PDA
FROM TEAM FORTRESS 2!

Featuring multiple key layers
and 100% custom OLED
graphics! w/ QMK!



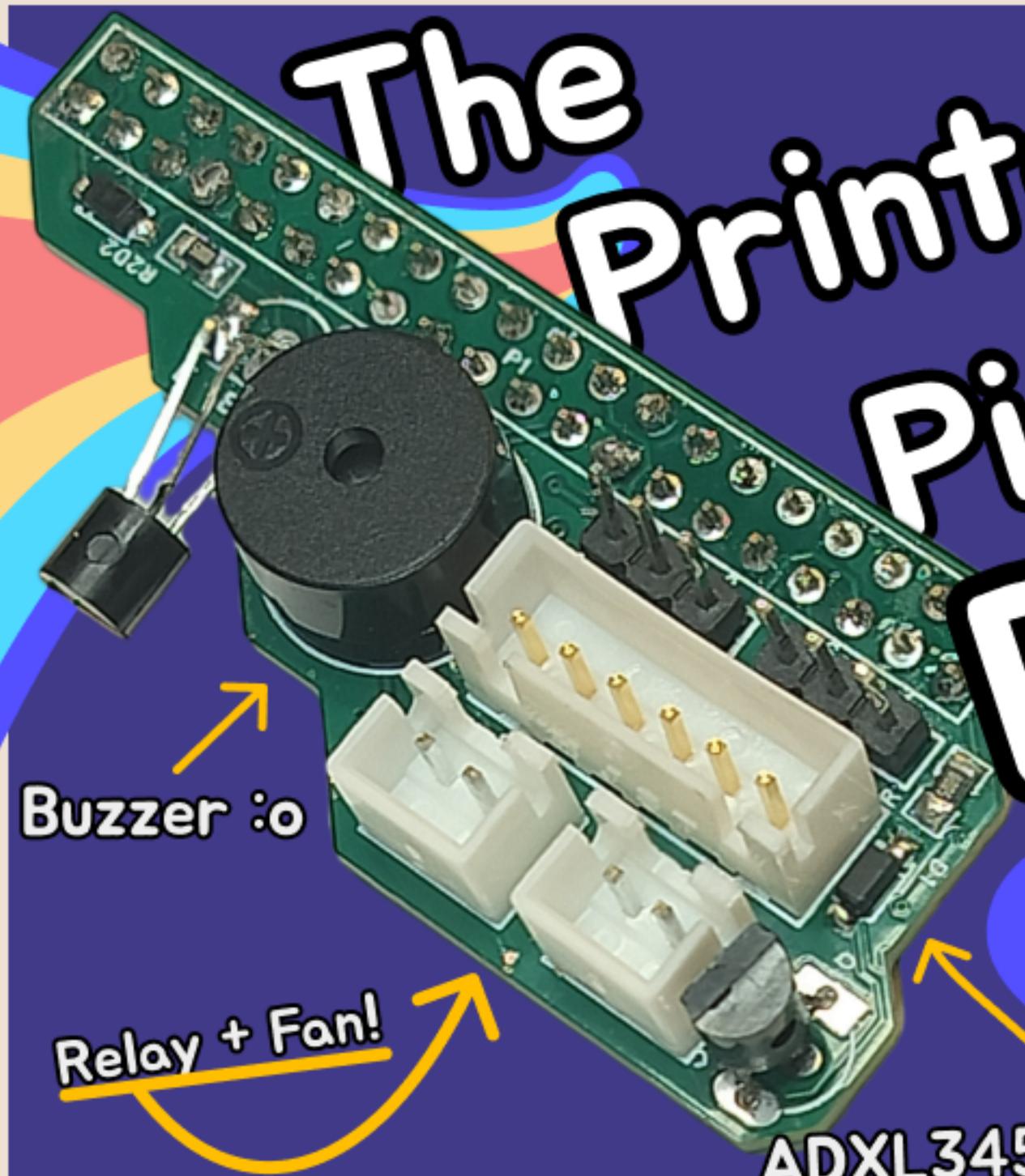
The Printer Pi PRO

scan me pls



the perfect Raspberry Pi
Hat for any 3D printer

by Anicetus, 14, USA



A keyboard...
in the form of a biblically
accurate angel!

- 30 keys, all in massive rings of custom keycaps and switches!
- powered with QMK!
- can make you feel the unyielding, burning gaze of
- their name is bobby :D

THE BIBLICALLY ACCURATE KEYBOARD

(by alex tran!
a 15 y/o. from florida!)



HACK CLUB

is it practical?
...no
but it looks
cool :>



scan here for repo!



Macro Board



By Ansel Dsouza
(15, Massachusetts)

Custom Firmware

Volume Knob

Full TKL layout with up to 22 macro keys

Pi Pico Powered

Speed typist-approved

Hand wired!

USB-C connectivity



wpm
148
acc
100%
test type
time 15
english

A split mechanical keyboard prototype, proving mistakes are just part of the process

RGB!

Oled Screen

ESP 32!

Read more!

101

Nibunkatsu one

by GabiBrawl from Portugal 🇵🇹

Relio



GitHub ↓

A custom wireless split keyboard built from scratch using a Seed XIAO BLE by a 14-year-old hacker.



made by @hex4 (neven) 12 · canada!

[glyph]

rgb

joystick!

grass???

[glyph] is the split mechanical keyboard I wish I had.

- ✦ designed in kicad + onshape
- ✦ powered by 2 raspberry pi picos (running QMK firmware!)
- ✦ hotswap switch sockets! joysticks! rgb!
- ✦ I spent way too long assembling this

Hex-4/
glyph



make it expressive.

stm32pe midi controller

by danny (17, U.S.)

- two full octaves
- extra key on the left
- on the stm32 platform
- usb c on the go device
- pwm led on each key



STM32H7

TLC5940 LED mux

Debug LEDs

USB-C High Speed

4 layer pcb
made on kicad™ (21hrs)

a midi keyboard that uses the **mpe midi protocol**. it allows the creation of more **expressive** music using **per key** pitch change with full velocity input sensing.



scan for more info!

screenshot is from the ableton demo project: chuck sutton - patience

MANKIND IS DEAD.
BLOOD IS FUEL.
SD IS FULL.



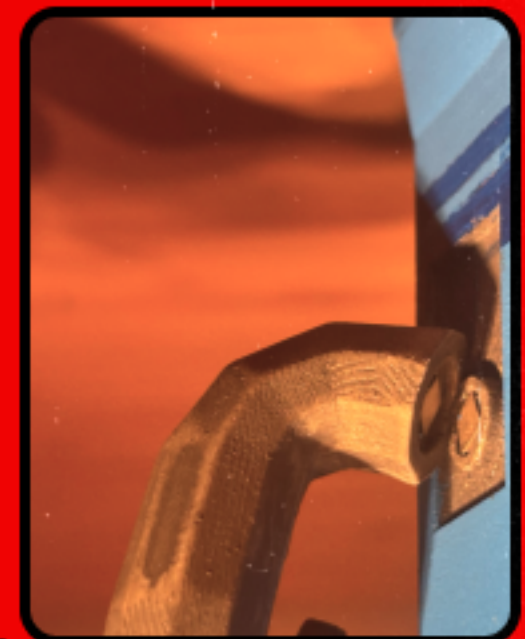
"The terminals, unable to move,
have grown bored."

Straight from the depths of hell
itself, ULTRATERM is my attempt
at making something fun and
custom that I'd still actually
use.

I stumbled onto the idea of
"make the ultrakill terminal
real" pretty early on. From
there "Music Player" just ended
up emerging as a product of what
the form factor allowed.



Back IO: USB-C port & SD card slot



Magnetic detachable cable
thing (for accuracy to source)

Aside from where
the ports went,
everything was
informed by my
terminal of choice.
The hardest part
of design and assembly was the
screen and buttons, which had to
be mounted far from the PCB.
This was ultimately solved with
far too many jumper wires.



3 button media controls

Overall I'm pretty
happy with this
project.

I guess if you're
ever stuck for
ideas, try making
a fictional device
real!

Project rating:

ULTRAKILL

- + BLUETOOTH
- + TOUCHSCREEN
- + USB-C
- + BUTTONS x3
- + SD CARD
- + RECHARGABLE
- + LOOKS COOL
- + MAURICED

FRESH: 1.50x

ULTRATERM

A PORTABLE, WIRELESS, MUSIC PLAYER

MADE BY FINN, 16, CANADA

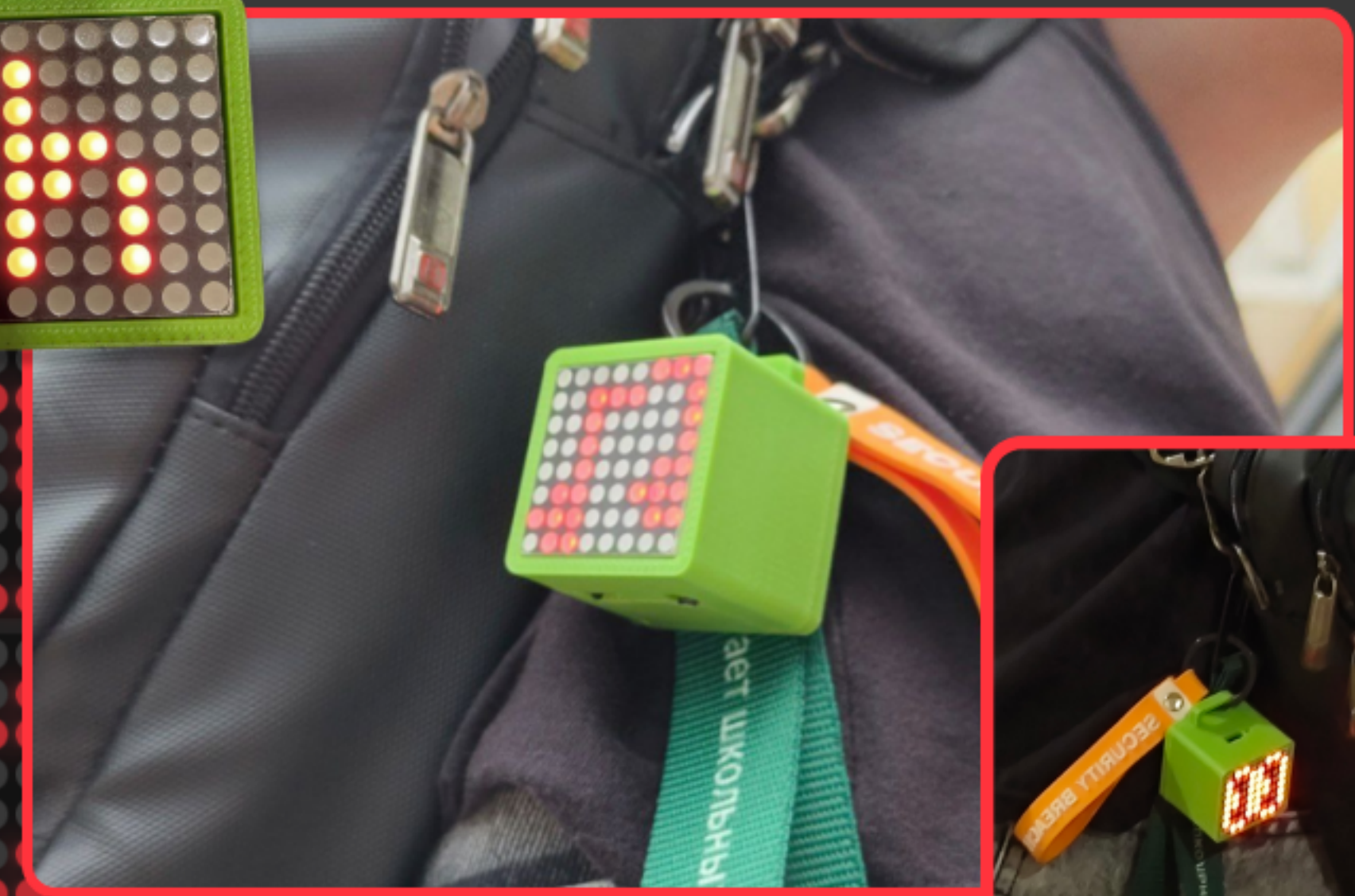


hacktime 27h 49m

BIT::BUSY
IS A DIY PRODUCTIVITY
DEVICE THAT
INDICATES YOUR WORK
STATUS, SO YOUR
COLLEAGUES WON'T
DISTRACT YOU.



bit::lace



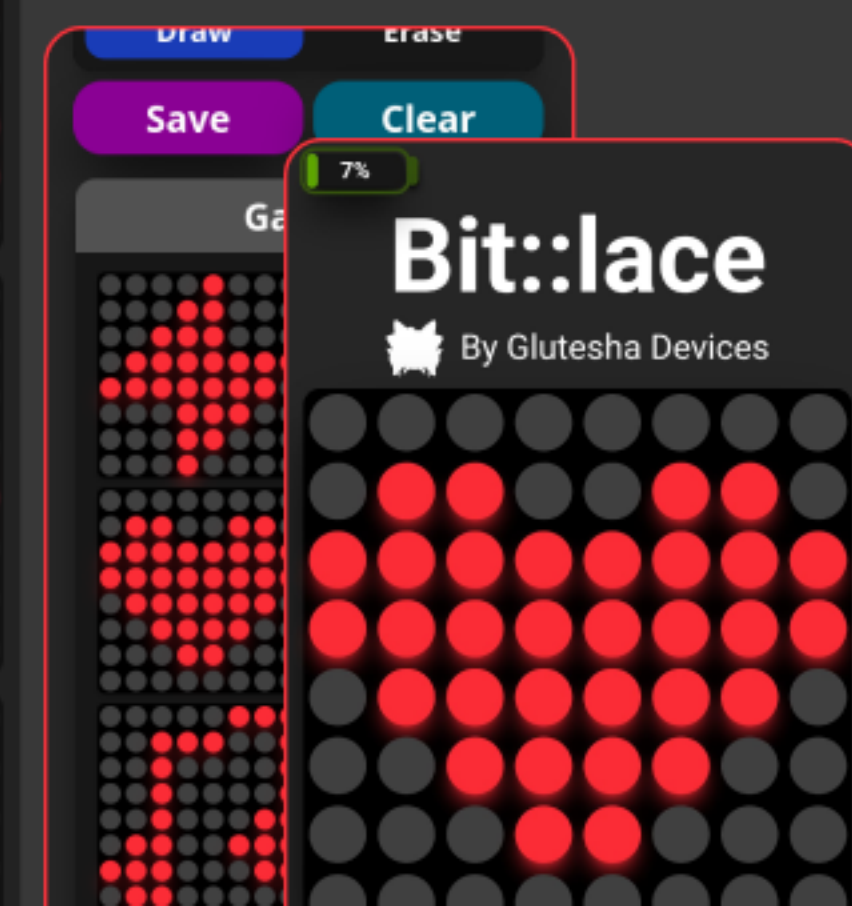
designed with some help from Anya Hori

A VERY COOL AND
FASHIONABLE DIY
RETRO DISPLAY
THAT YOU CAN
WEAR AND DRAW
ON USING YOUR
PHONE!

- FEATURING:
- WI-FI HOTSPOT CONTROL (APP NOT REQUIRED)
 - 72-HOURS BATTERY LIFE
 - MONOCHROME DOT DISPLAY WITH A COLOR OF YOUR CHOICE

hacktime 38h 41m

PROJECT LINK >



computer webcam detects finger touches!!

Dyno

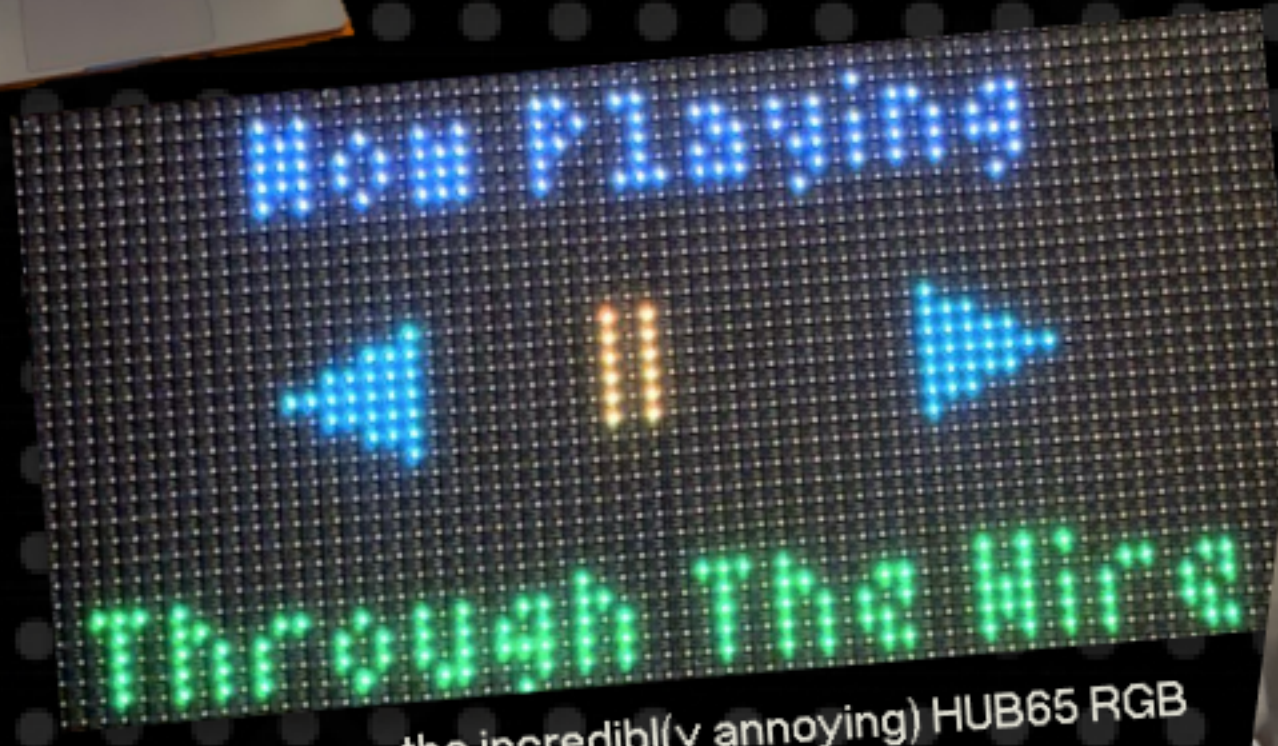
Jayden L., Shlok M., Tanishq G. @ Undercity 2025!

The only non-capacitive touchscreen widget board you'll ever need.



have you ever needed a handy second screen? just plug Dyno in via usb-c!

gone through 50 hours of intense revision and ***working the LED matrix***



the incredibl(y annoying) HUB65 RGB LED matrix

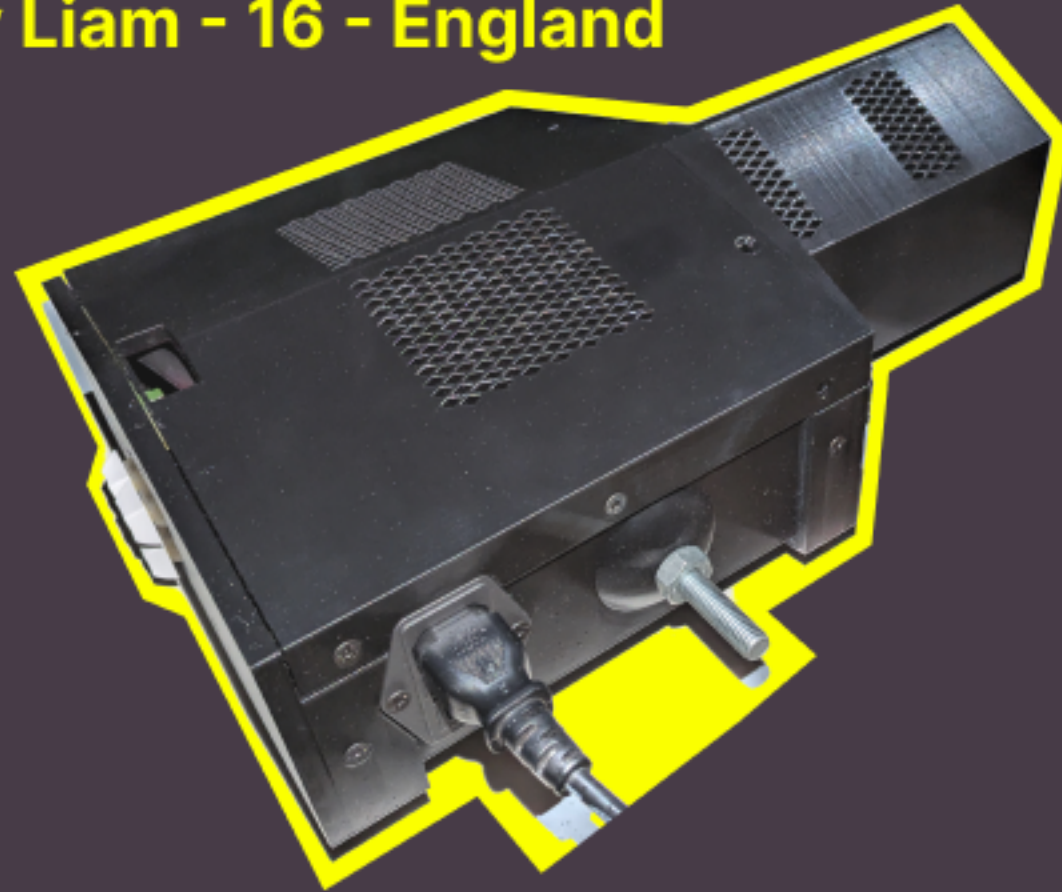


live @ undercity!

HIGHLIGHT

By Liam - 16 - England

Highlight is a theatre spotlight I designed and built for highway, because my teacher wouldn't let me make it for a school project



More!

The components and heatsink can handle up to 150W of power, but I've limited it to 80W because otherwise the plastic around the LED starts to get melty

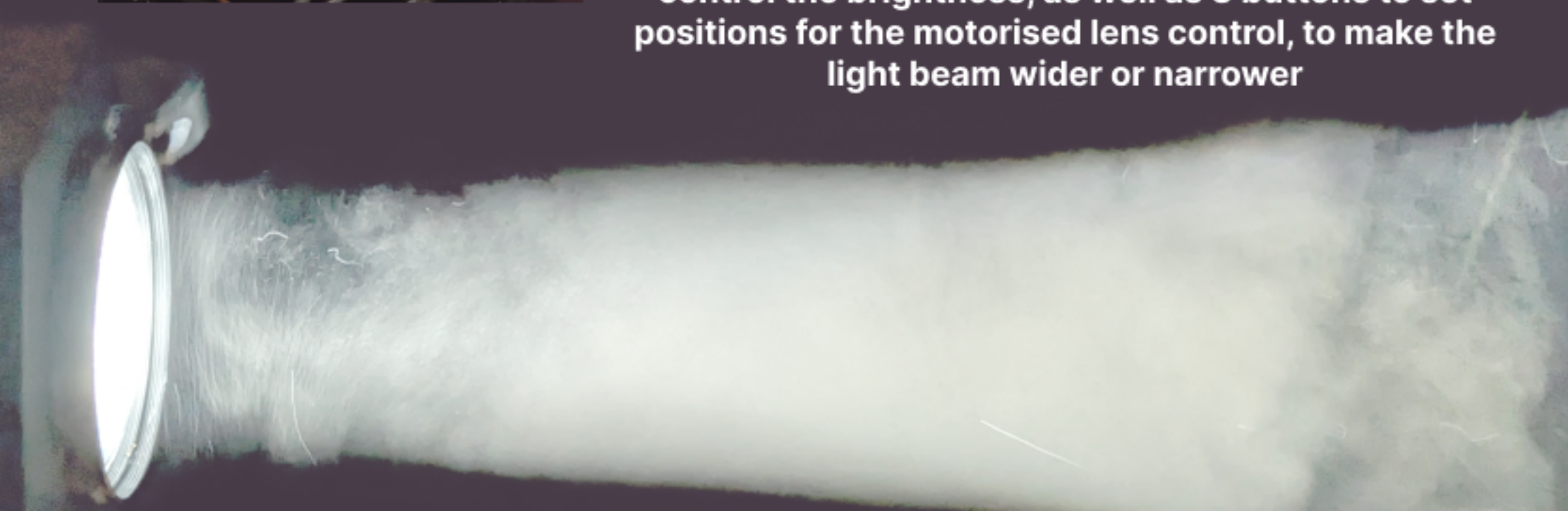
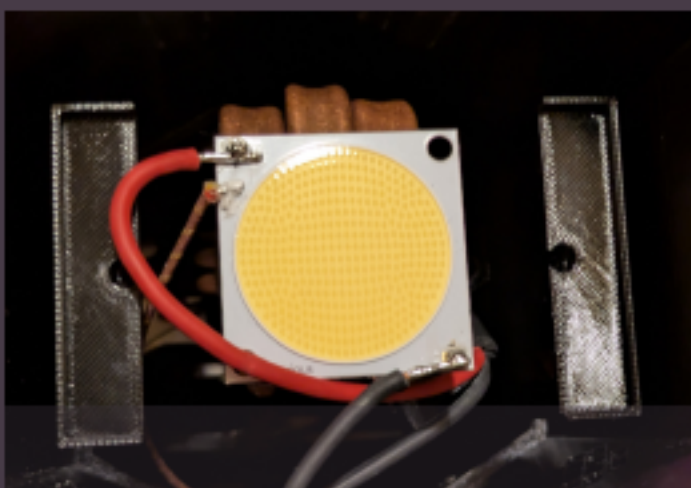
Here, 80W is 10,000 lumens! And 150W is 20,000lm!

The body is 3d printed out of black PETG

I used an upcycled camera lens which was too beaten up to use in a camera but perfect for a spotlight!

Using 3d printed jigs, I bent 3 heatpipes to take heat away from the LED to the heatsink, which is an old CPU cooler from Vinted

There's a fader (slide potentiometer) on the back to control the brightness, as well as 3 buttons to set positions for the motorised lens control, to make the light beam wider or narrower



LUMA ルマ

A Minecraft ESP-32 powered lantern
Made by Nathan Alspaugh - 17 - Colombia

Features

- Bluetooth support (ESP-32)
- Custom app to control colors and lights
- WS2812B Powered!
- 3000mAh battery (for exploring caves)
- Looks cool (what more could you want?)



MODUDECK

The Open Source Modular Cyberdeck.



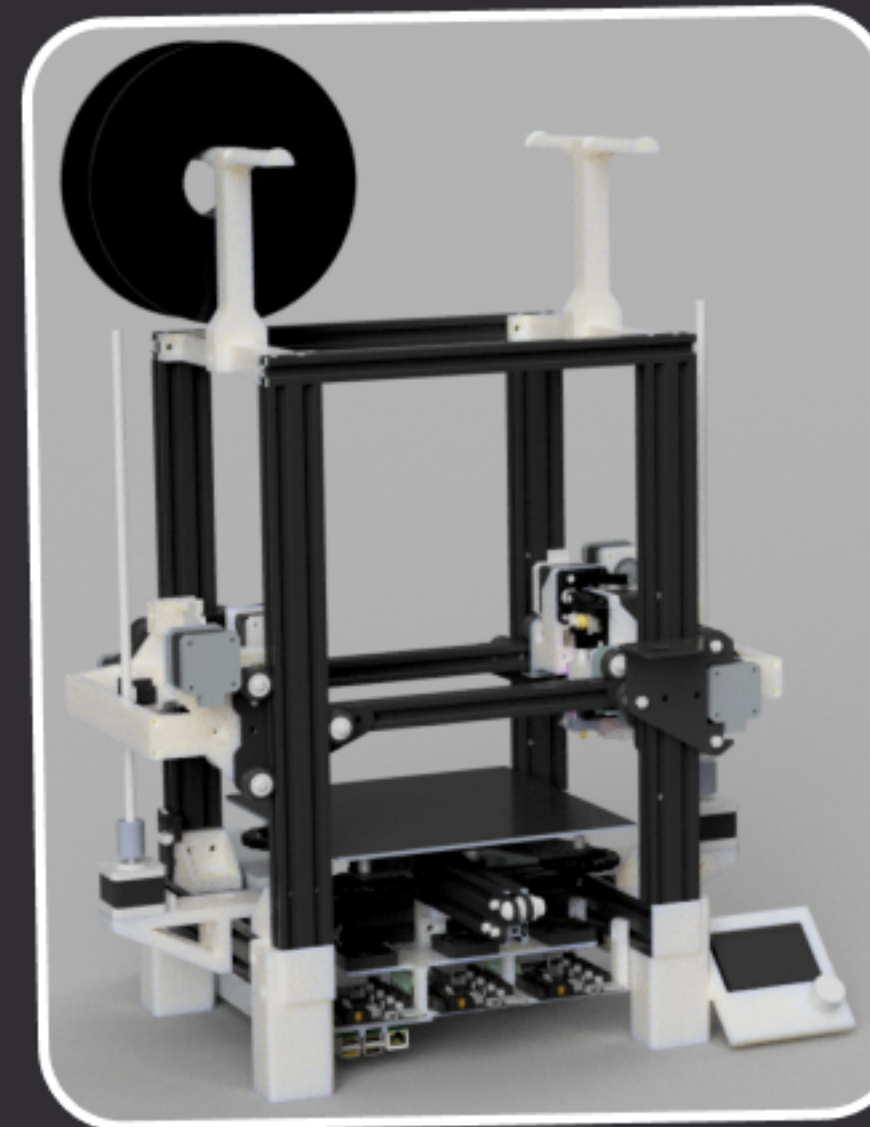
COMPUTE

YOUR
SBC
HERE

Matteo
Age : 16
State : NC

2500
MAH

BATTERY



Ender X4

A low cost, quad extruder 3D printer based on the Ender 3



Built by Allen D (17, USA)

GitHub repository
and CAD files

Build cost: \$400

Time spent: ~150 hrs

The Ender X4 uses an IDEX design on 2 different X axis gantries, allowing for 4 different toolheads to move independently. This eliminates the need for a complicated tool changer or wasteful AMS system.

80% of the printer is constructed from the parts of two disassembled Ender 3 printers, which brings down the cost tremendously.

Some Fun Facts:

Direct drive!
Runs Klipper!
2 CR Touch probes!

3 control boards!

2 power supplies!

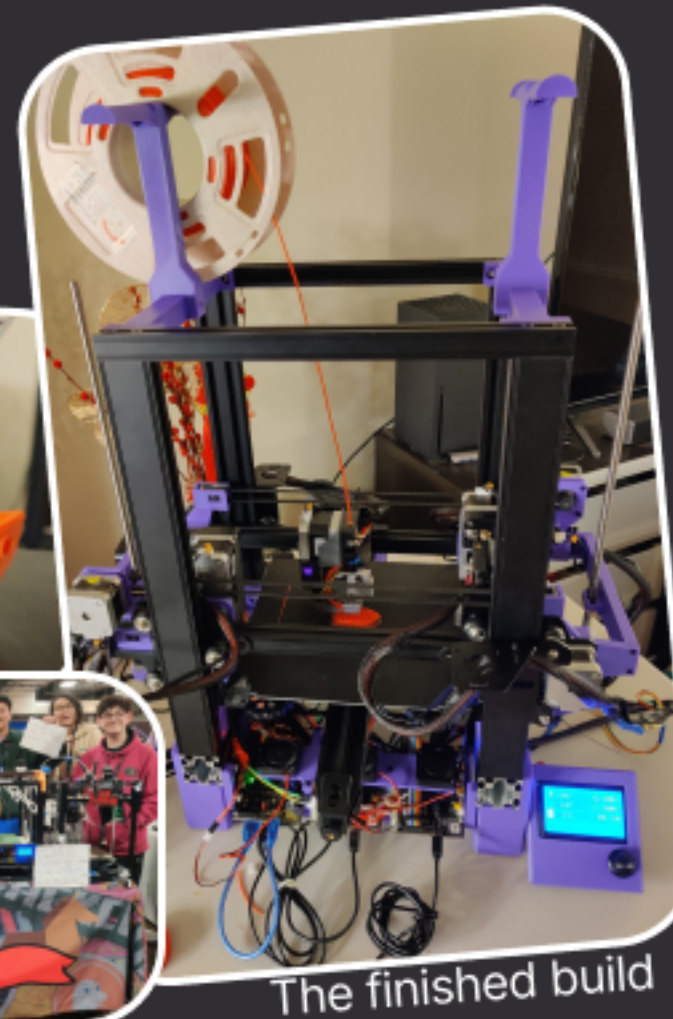
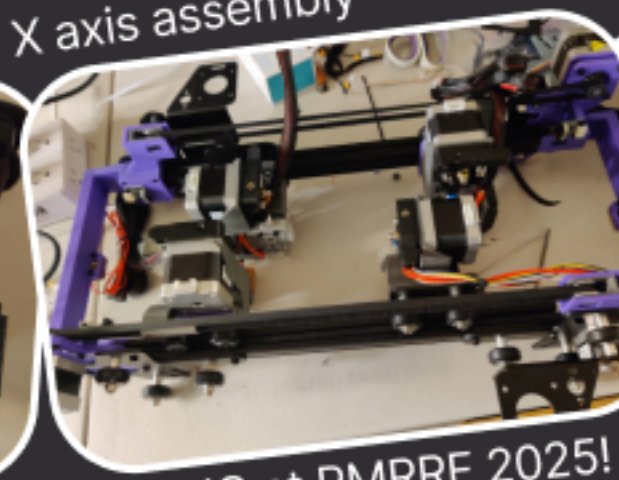
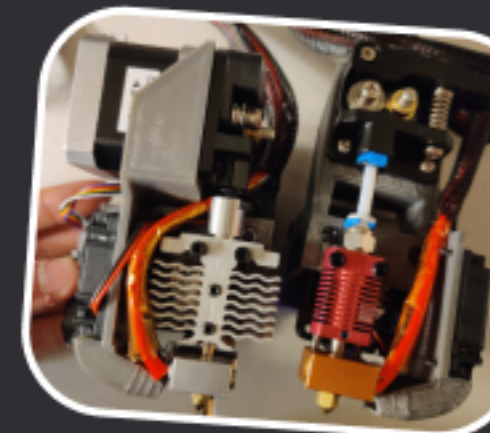
Dual Z motors!

(200mm)³ volume!

Two toolheads

X axis assembly

First print



This was part of the Infill YSWS, where Hack Clubbers deigned and built 3D printers from scratch, then traveled together to the Rocky Mountain RepRap Festival to show them off.



The finished build

The ReadGood

(It helps you read good.)



The readgood is unparalleled by any e-reader. It shows only one word at a time, but it scrolls through them at super speed!

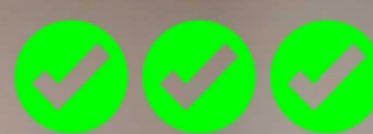
Watch me build it: ↴



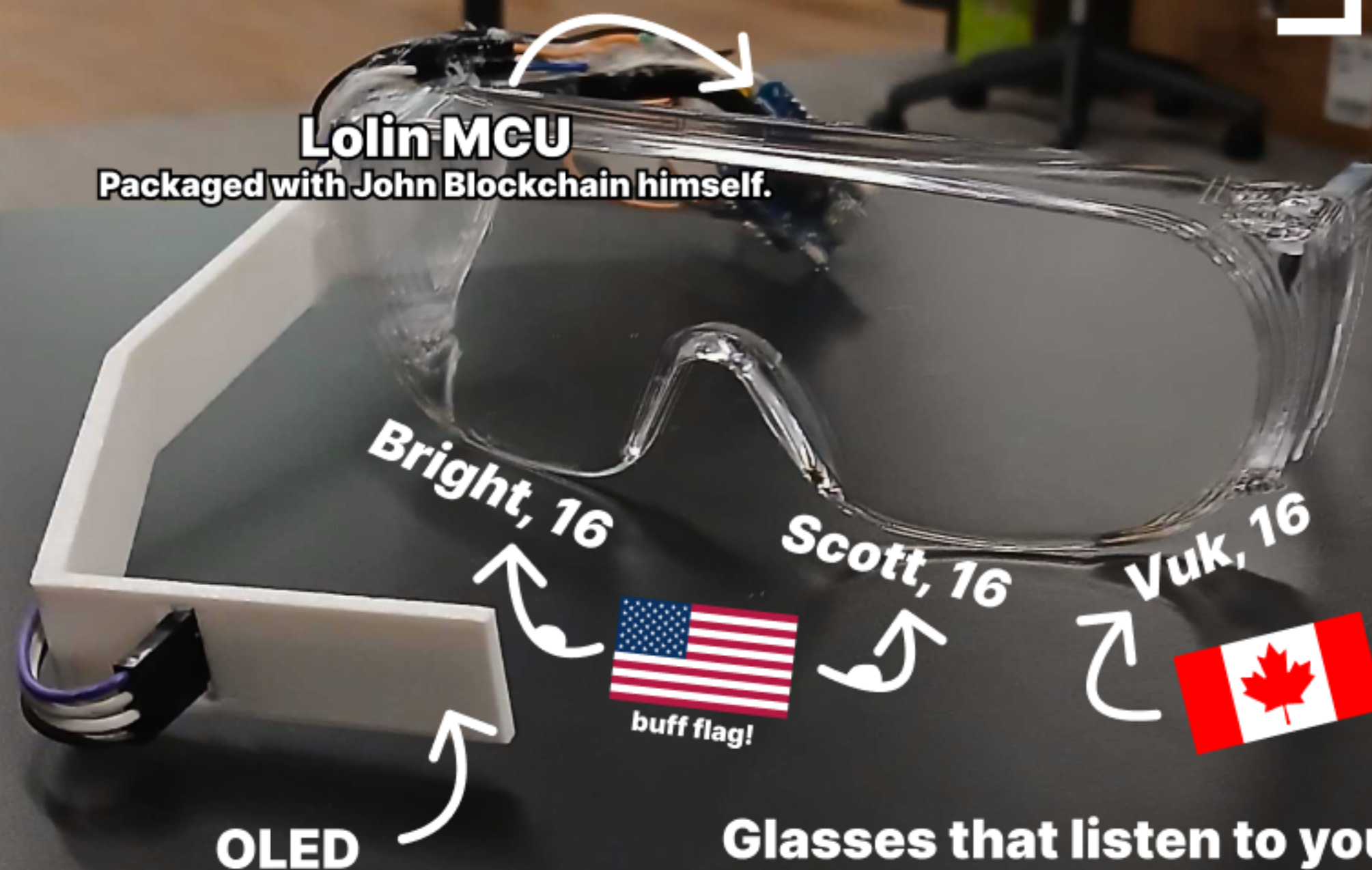
Designed by
Will Dana, 17
from Arizona



John
Blockchain
Approved



「SH*TTY META GLASSES」



Glasses that listen to your
conversations and feeds you
jargon to say.



Top 10 @ Undercity
Made during a sleep deprived
weekend in San Francisco.

BLIND DEFUSAL

TOP 10
@ UNDERCITY
.....

A TWO-PLAYER, COOPERATIVE "BOMB DEFUSAL" GAME.



YOU'RE TRAPPED WITH A TICKING BOMB.

YOUR TEAMMATE HOLDS THE KEY TO STOPPING IT.

BUT HERE'S THE TWIST: THEY'RE BLIND TO WHAT YOU'RE FACING.

COMMUNICATION IS YOUR ONLY LIFELINE AND TIME IS RUNNING OUT!



MADE BY JOSH (16), BRANDON (16),
JOHNATHAN (17) // 100% AUSSIE TEAM.

GITHUB REPO



Top 10 at Undercity 404: Drink Not Found

Win a game against the blot and get a drink of **not** your choice from the vending machine!



Community Contributed Art

Touch Display



180°
Spinning Platter

Made by Sharon (Canada),
Danny (U.S), and Meddy (U.S)

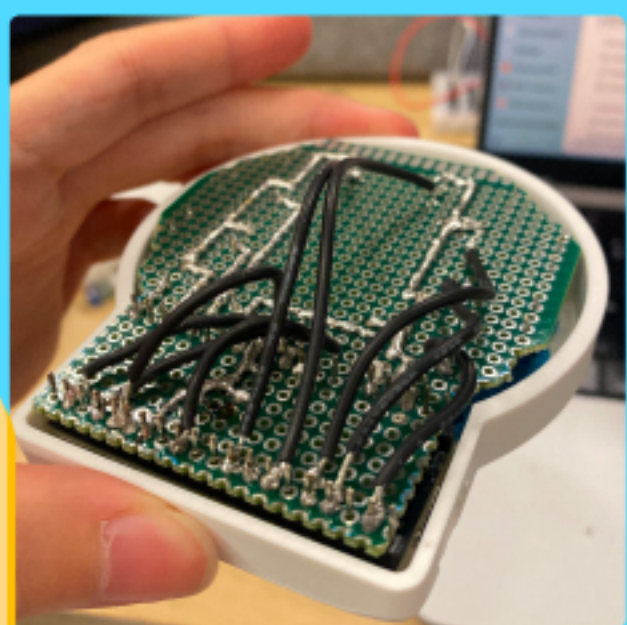
- Flask (rpi4 & blot)
- Tailwindcss (both)
- Vite (blot)
- React (blot)

See the GitHub Repo!



minimai

BY TONGYU (19, SG)
@ UNDERCITY



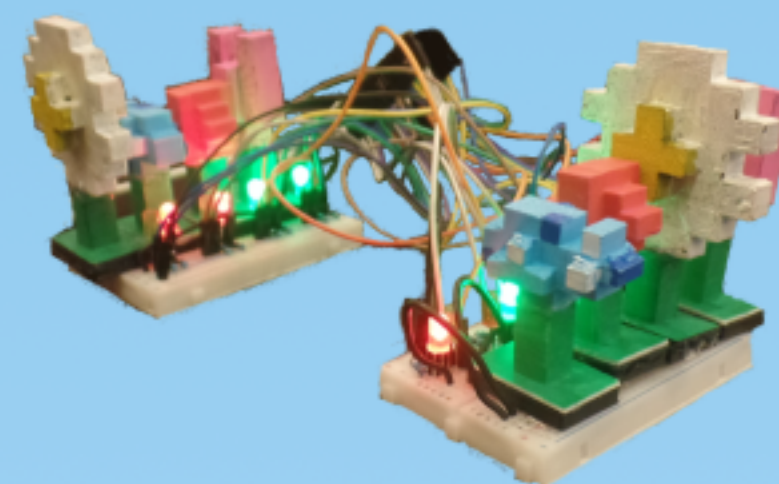
A TINY RHYTHM GAME CONSOLE

minimai is inspired by the arcade rhythm game maimai. it uses an orpheus pico, a 1.28in tft, 8 buttons, a speaker, and lots of hot glue.

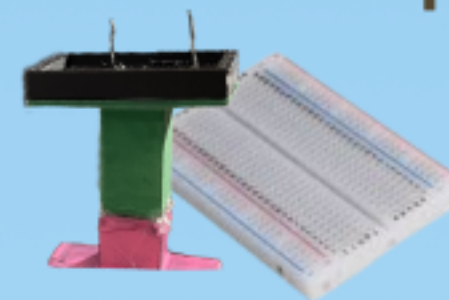
i love rhythm games :)

Flowerndie

by Yi An, 16, Taiwan Akshara, 17, Singapore Suhansh, 18, Singapore



Project GARDEN

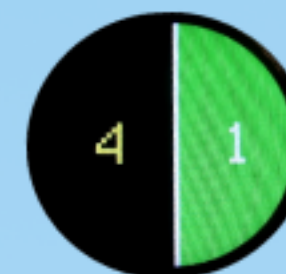


Plant your flowers into your breadboard!



See how correct your guess is!

Guess the correct code in fewer tries to win!



repo



demo



WORD HUNTER

TOP 5 @ UNDERCITY

A word-hunting robot that dominates Word Hunt on GamePigeon

"There is NO chance I'm beating that!"

Created by Jeffrey Wang, Eddy Zhao
(18, MA, USA)

CoreXY Gantry

NEMA 17 Stepper

Apple Pencil

Servo Motor

Max Accel: 18,000 mm/s²
Top Score: 35,000+
Cheat Level: 100%



Take photo with webcam



Detect letters in grid



Move and actuate pen



Find possible words and sort by length

GitHub Repo



Demo Video



Spinny Snake 3D

TOP 5 @ UNDERCITY

A rotating neopixel cube of the classic game snake!

Spins to face user!

highest score: 34

Created by
Arya, Ethan, Dhyan
18 PA 15 AZ 16 MA

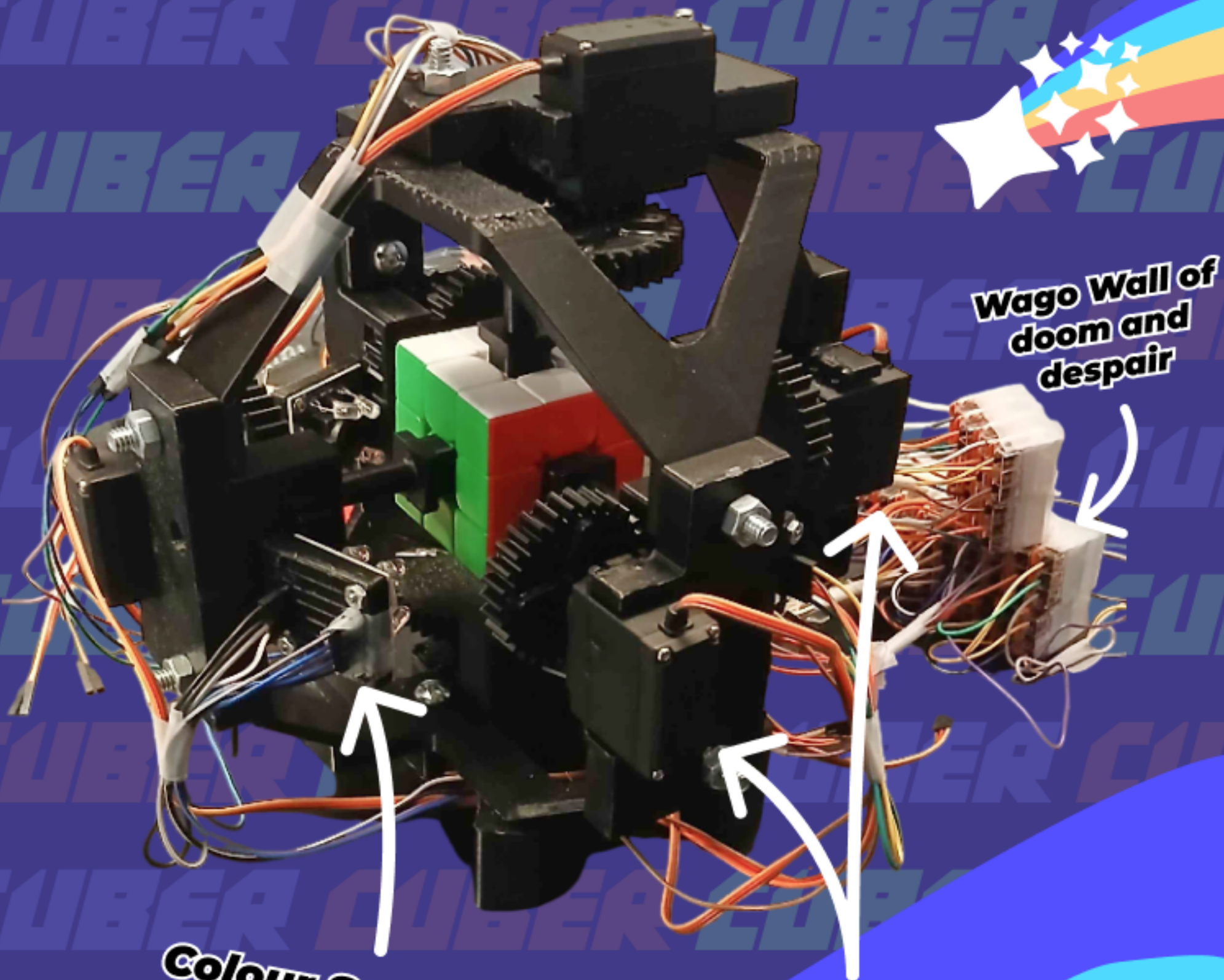
Open Source!



CUBER

The
automated
rubiks
cube
solver

Vuk, 16, Vancouver



Wago Wall of
doom and
despair

Colour Sensors

Servos

Github Repo



Demo Video



80+ Hours
Sub-20 Solves

1 ESP32 + 6 MG996R Servos + 6
TCS3200 Colour Sensors + 30
Wagos + 1 bajillion dupont
cables

DIODE LASER CUTTER

By Pegoku (Pere)
16 y.o. from Menorca

10W 450nm LASER

Capable of speeds
of +15000mm/min

Can cut up to 20mm
Plywood 1 pass!

Capable of 2D cutting
and 3D engraving!



FluidNC WEB UI

REPO

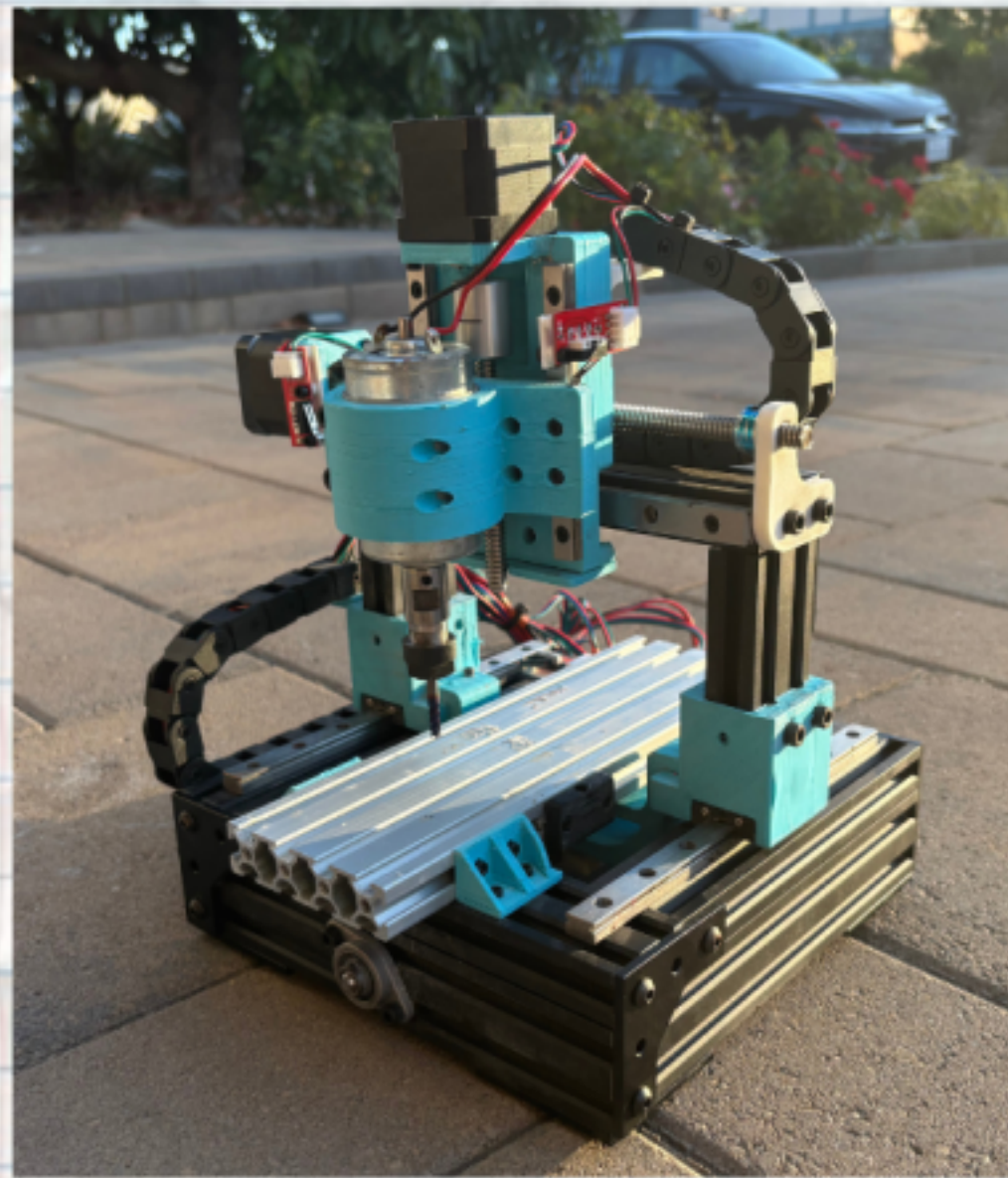
Build your own



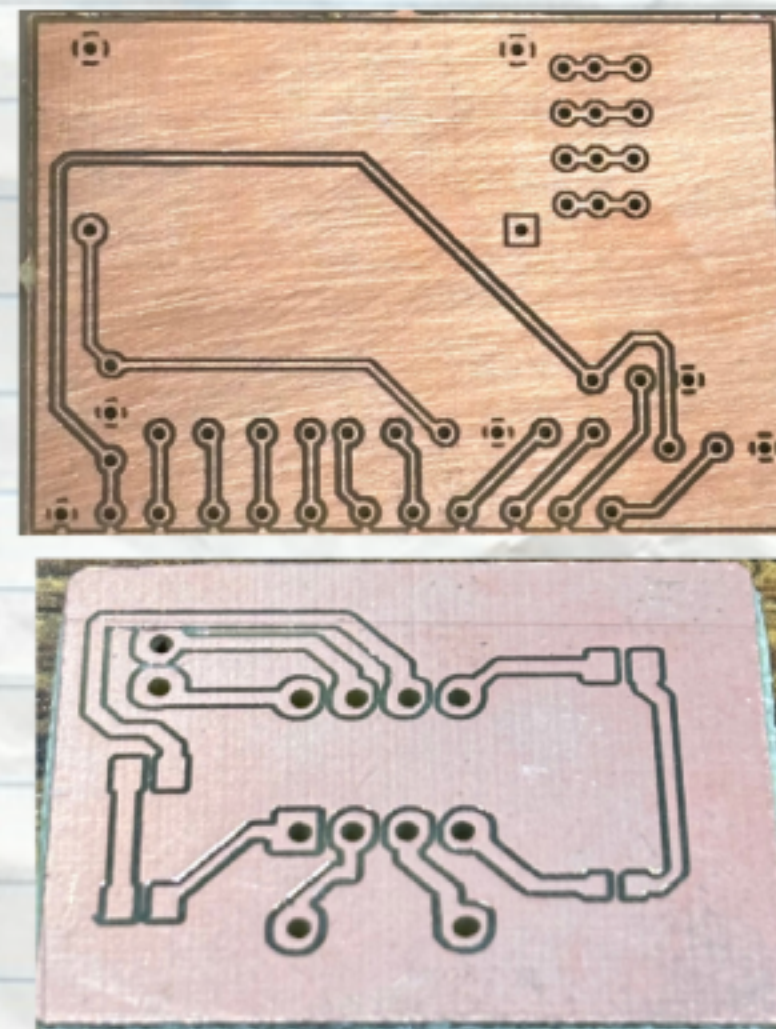
CircuitCrafter Mini

A compact, high-precision portable PCB milling machine.

With a rigid aluminum frame, NEMA 17 motors, and leadscrews, it offers reliable precision. 3D printed parts keep it customizable and low-cost. It also handles light materials, making it a versatile prototyping tool.



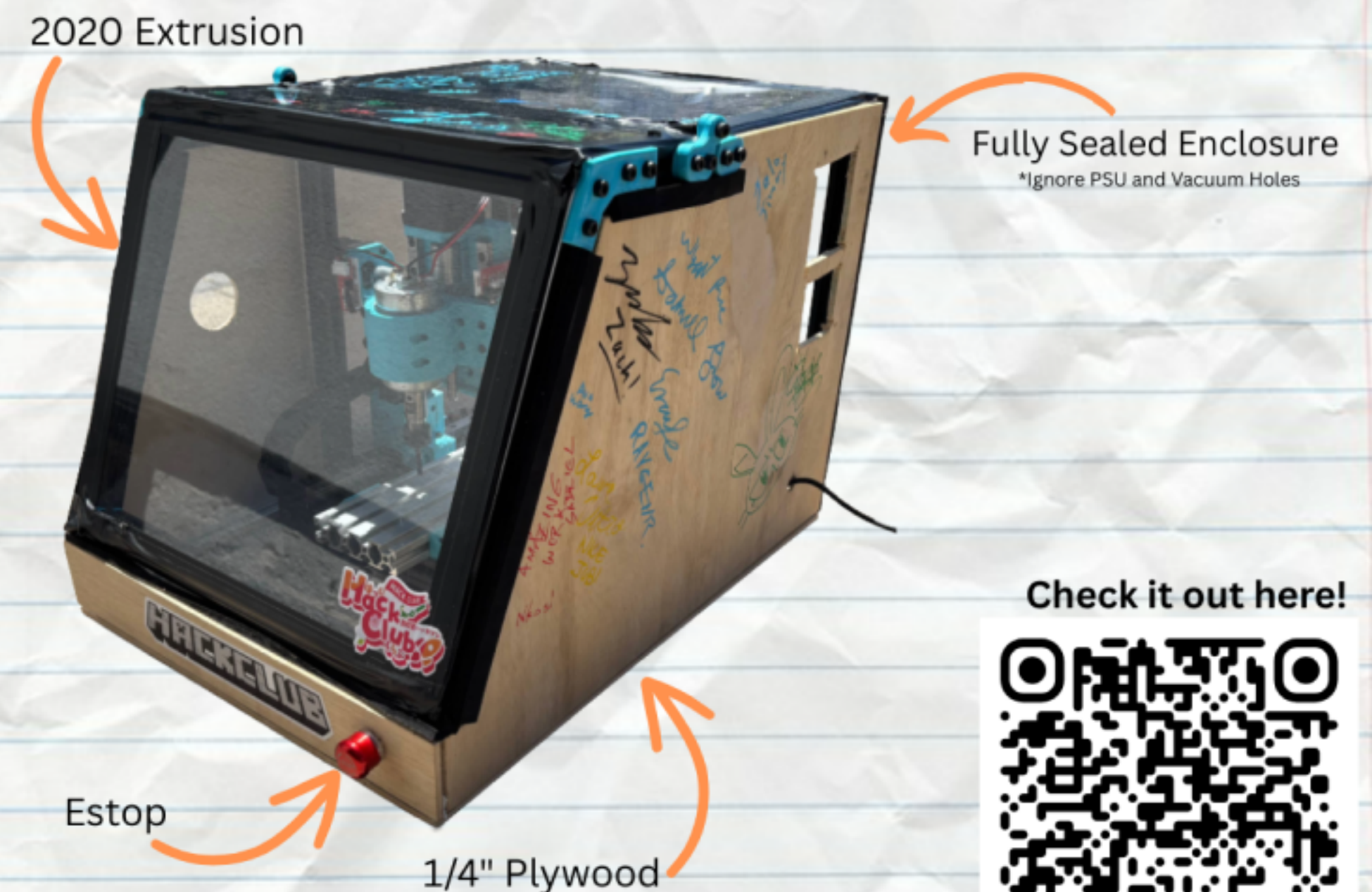
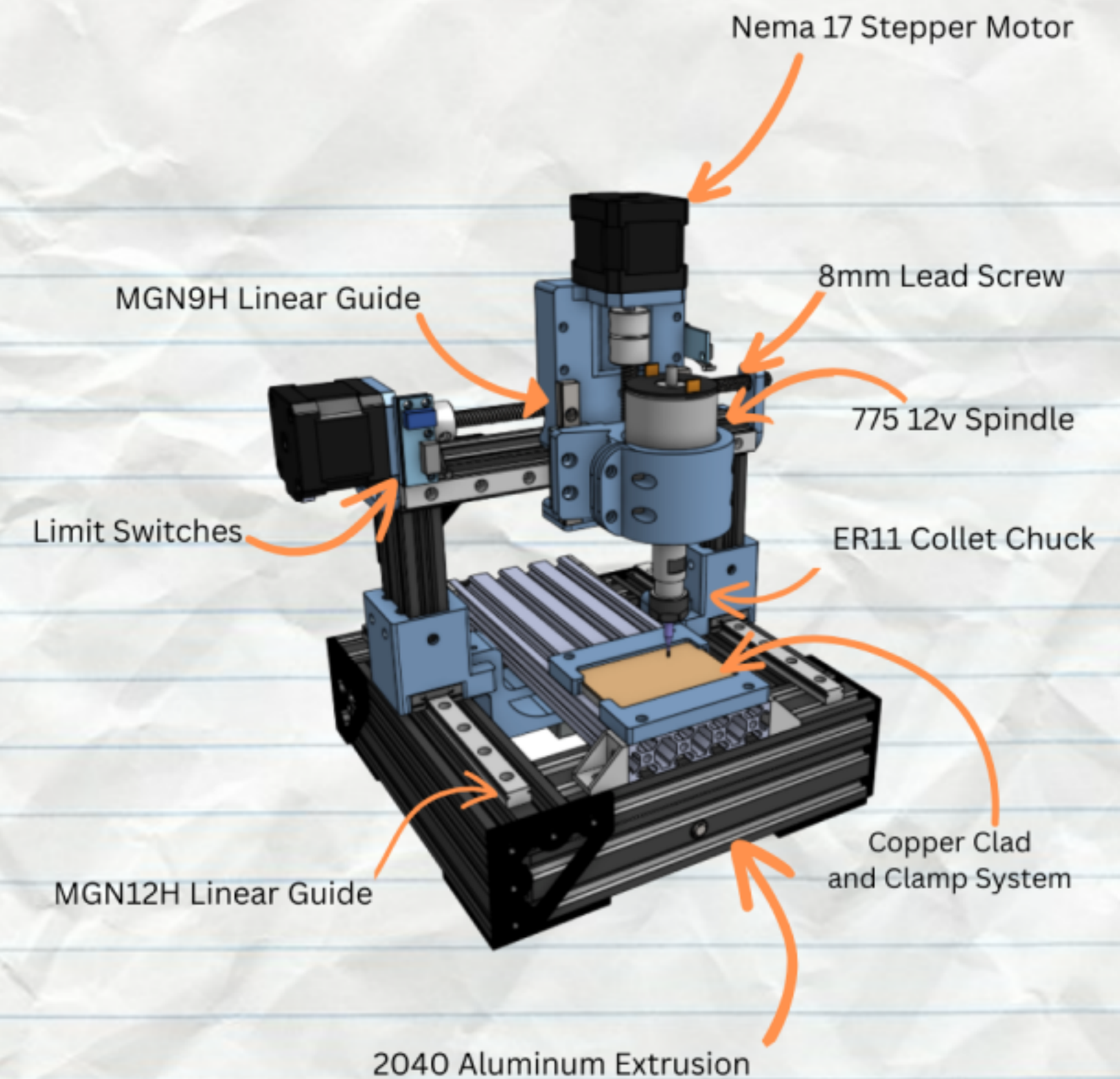
Sample PCBs:
(Machined with 0.1mm
Endmill)



Stats:

- Used @Undercity - Github HQ
- Demoed at Open Sauce 2025
- Designed *From Scratch* in 5 hours & Built in 2 days - Tuning
- Can Machine various material ranging from Aluminum to Wood to Plastic to Copper+Fiberglass
- Highly Portable with just a 220mm³ Footprint and powered with a generic 12v PSU
- Runs GRBLHAL

Cost: \$400 USD



Made by Akhil Pathapati (17, USA)

Check it out here!



Astrotracker H1

A budget star tracker for astrophotography.

made by Jayden, 15, USA

took me over 130 hours!!

works with all standard
1/4"-screw tripod
mounts & cameras!

comes with
automatic alignment in
a computerized controller!!

link to repo!

JUKEBOX

A functional Minecraft Jukebox!

Jukebox uses a Raspberry Pi Zero 2 with an RC522 NFC scanner to detect when you've put in a disc and play music!

Check it out here!

Made by Daniel Davidson, 17, USA

Not approved by or associated with Mojang/Microsoft. Obviously.

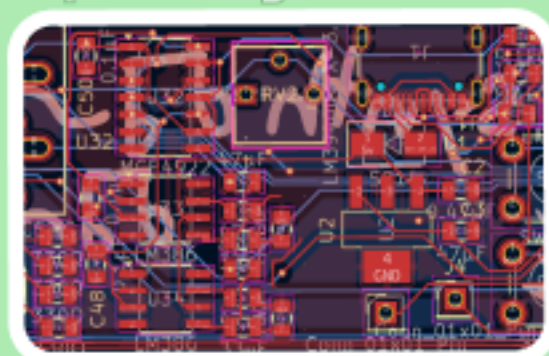
Robert the Minion

Robert the Minion is a minion that can wave its arms, blink its eyes, and say all sorts of things! Robert won 13th place at Undercity!

made by Aaradhya Panda
(@pizzalover125) and Daniel
Davidson (@dld) at Undercity!

repo demo

pcb design in 10hrs



An esp32 based synthesizer that uses position and force sensors to create magical sounds to any headphones. Inspired by Wintergatan's Modulin™

rotary encoder

cad in 5hrs

500mm length plywood

force sensitive resistor

configurable octave, vibrato, freq. + more! uart debug pins

by danny (17, U.S.)

slider-synth

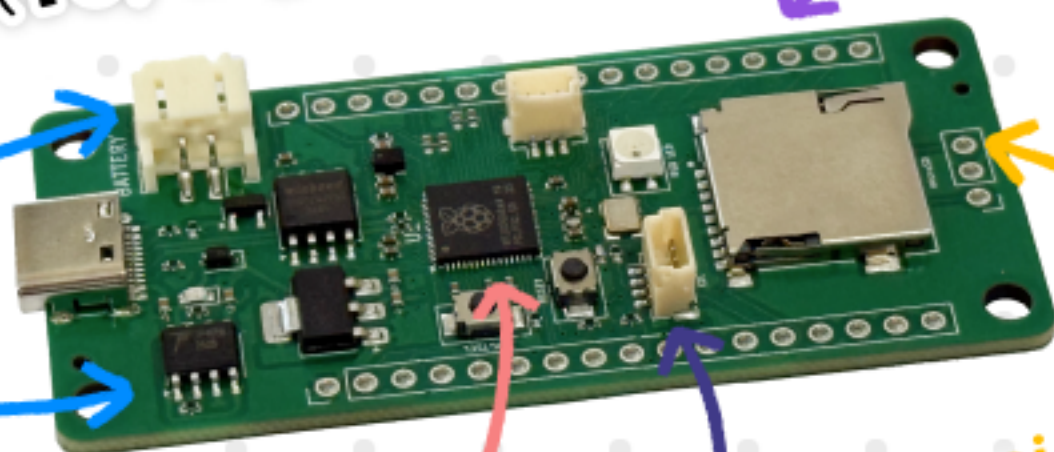


scan for repo!

RPBoard²!

made by valen (16, argentina)

lithium battery support!



RP2350!

I2C JST connector!

microsd card reader!

pcb in kicad!!

time spent: ~30h

RPBoard² is a RP2350 based devboard with multiple convenient features built-in!

scan me!

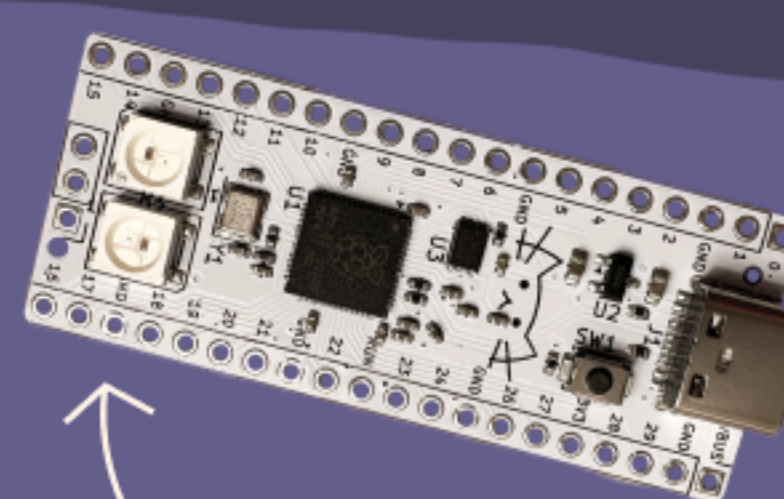


meet the

PICAT!

custom RP2040-based devboard

visit github repo



two blinky LEDs!

USB-C support



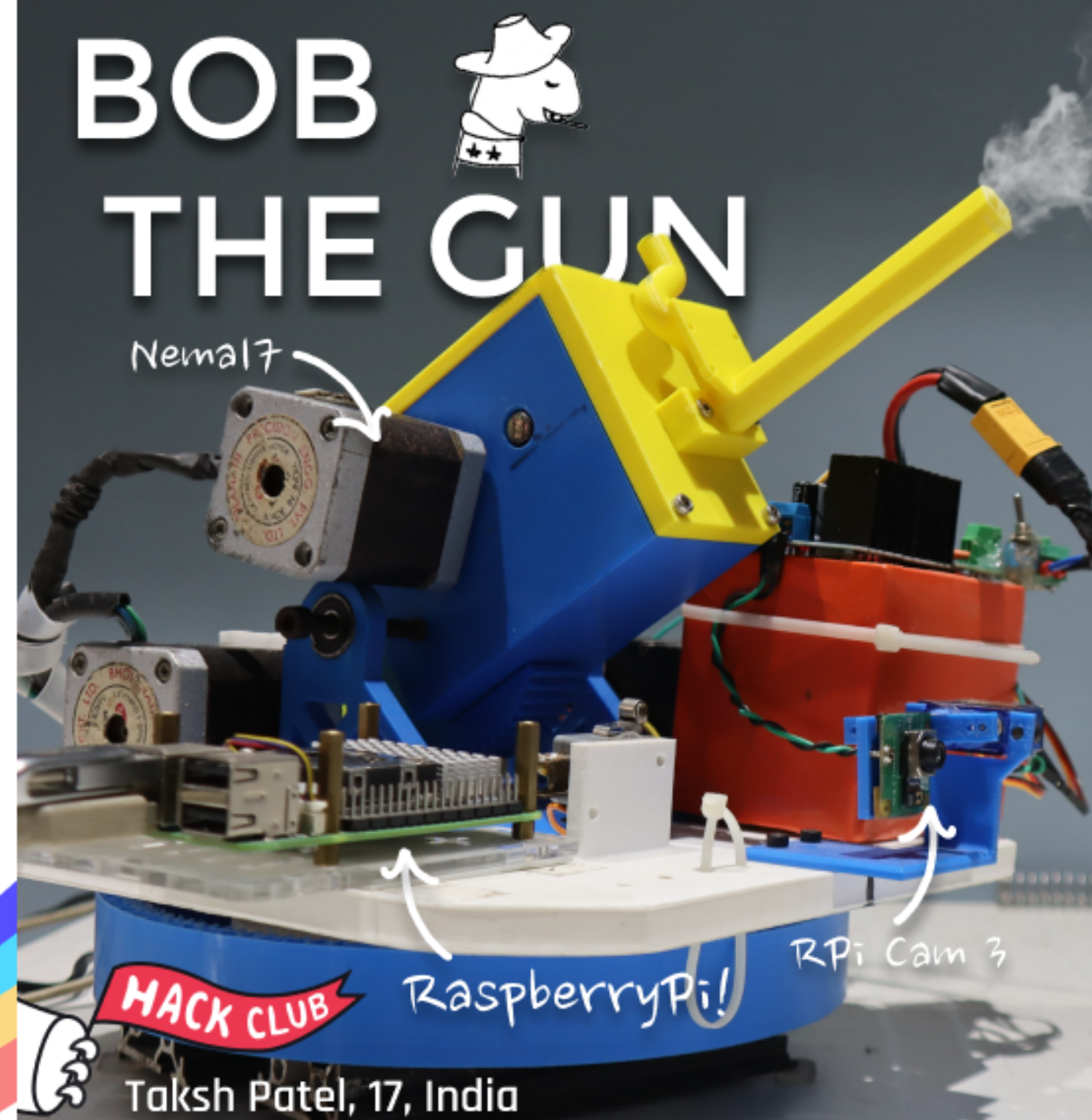
stylish custom silkscreen

Blueprint

created by Silas Unger, 17, in Seattle, Washington

BOB THE GUN

Nema17



An Automatic Turret like the tf2's engineer.

- 360° pan & 75° tilt thus **NO ESCAPE**
- On-Board camera for target detection!
- Can shoot too!
- In development for 200+ hours!

HACK CLUB RaspberryPi!

Taksh Patel, 17, India

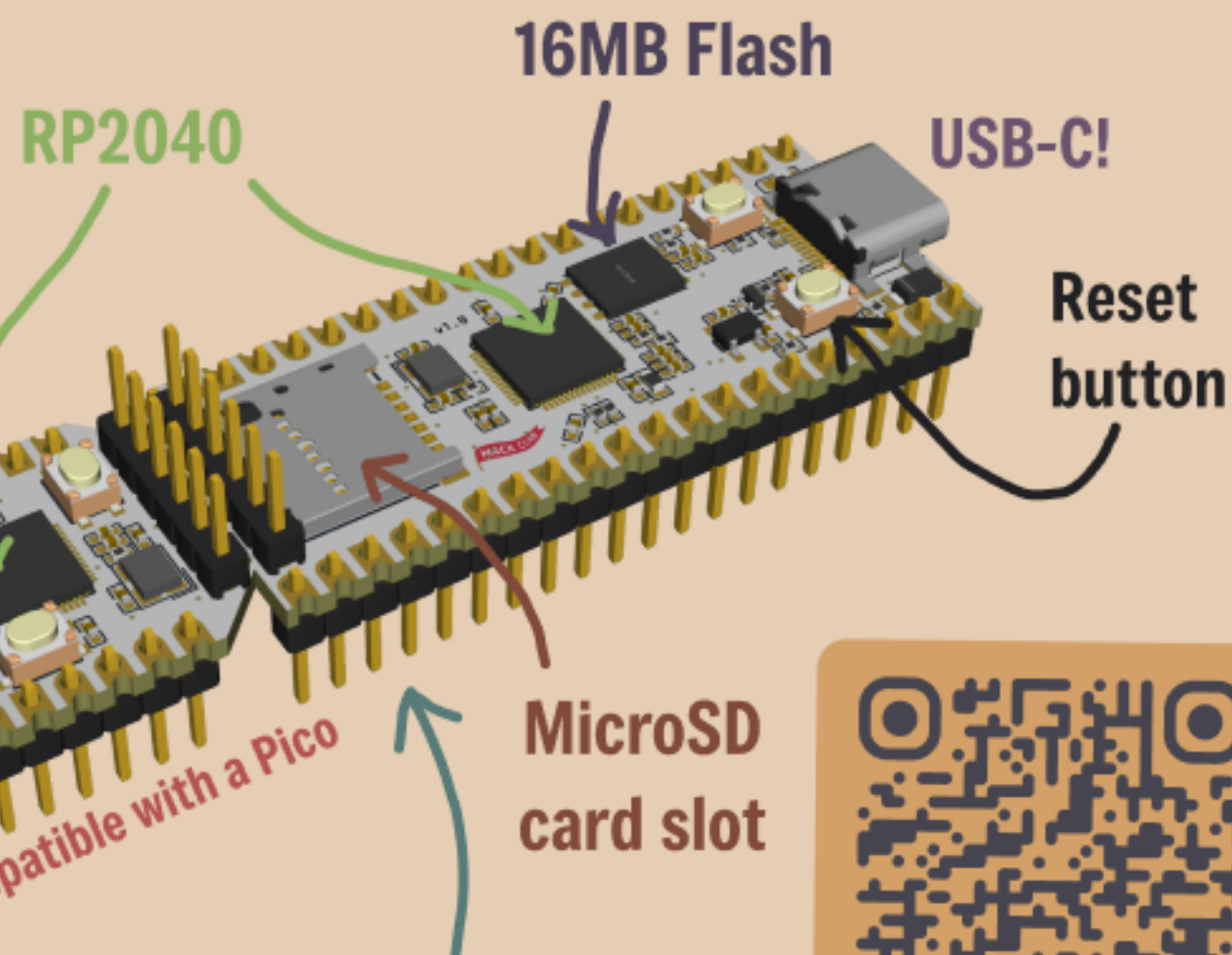
RPi Cam 3

Github



pico bug

A 2-in-1 RP2040-based devboard with an integrated debugger



Flappy bird on a Pi Pico
(or a picobug!)

Written in C!
No libraries other than Pico SDK



by Arca (17) - England



SSD1306 display

scan me!

I²C display driver
written from scratch



flappy

Breadboard+

By Ansel Dsouza
(15, Massachusetts)



A custom
devboard in the
shape of bread

Bread-like
Silkscreen

24 GPIO pins

Double the
firmware

ESD Protection

RP2040-
powered

ESP32-C3-WROOM
module for WIFI



Tiny4FSK

the reliable high-altitude flight computer

4 second rate

60+ kilometers!

100mW transmit power

single AA battery

extensible i/o pins!

Tiny4FSK is a high-altitude position tracking and computing device. It operates in the 70cm ham radio band and uses the Horus Binary protocol to send live position updates from near-space altitudes.

GitHub Repo

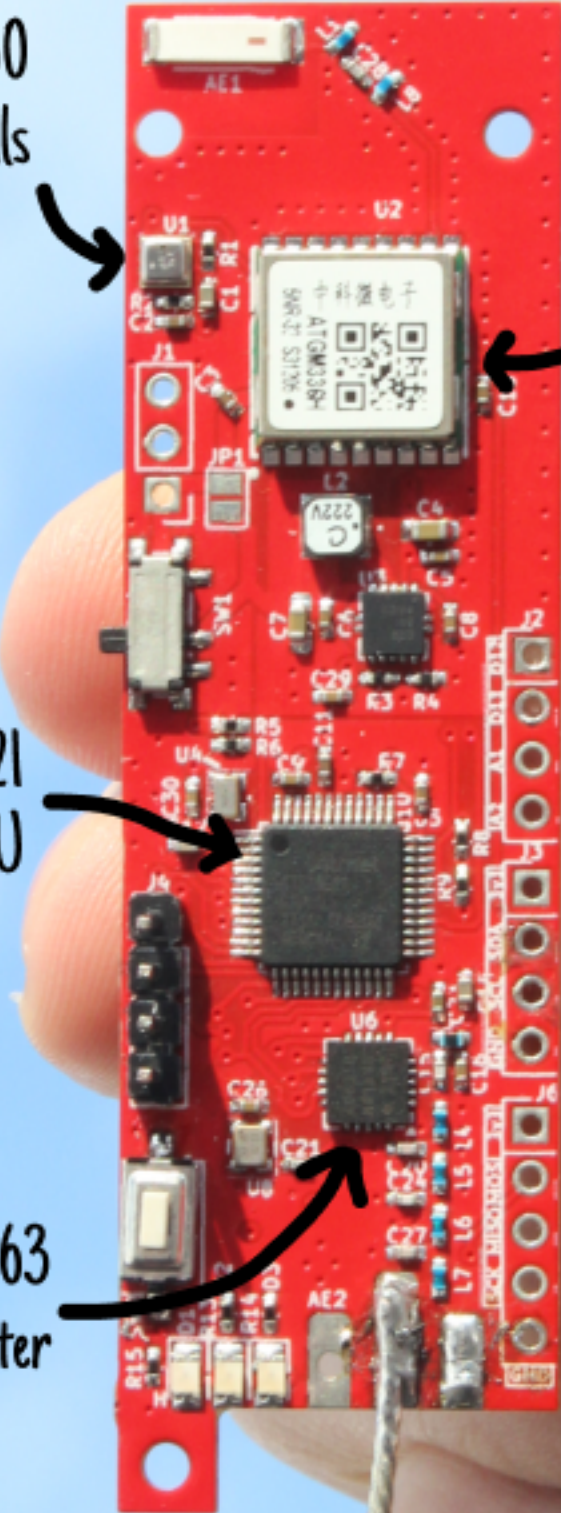


BME280
Environmentals

ATGM336H
GPS

SAMD21
MCU

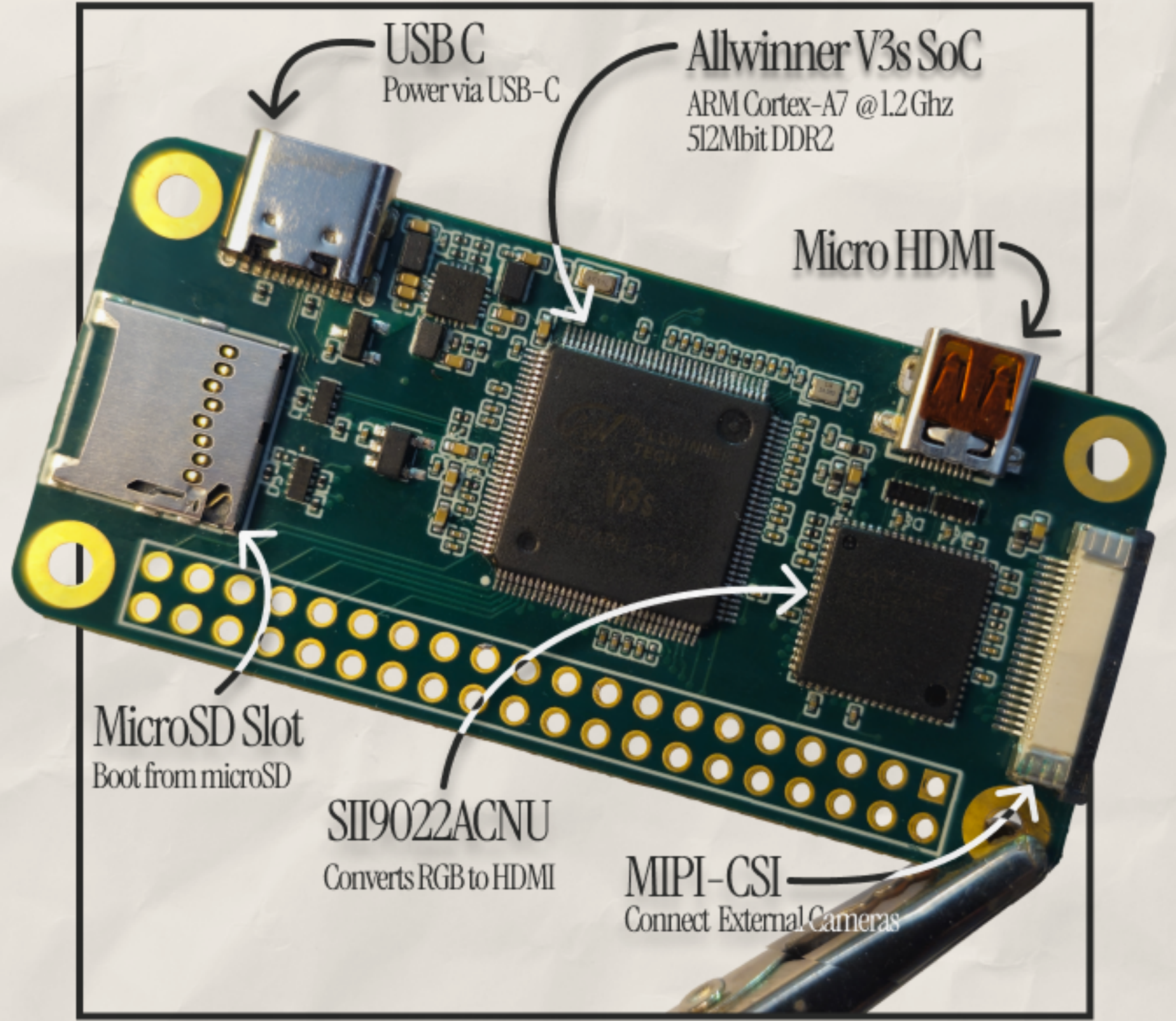
Si4063
Transmitter



Max Kendall, 15, Massachusetts US

V3S SBC.

[BY RUDY, 17, TORONTO]

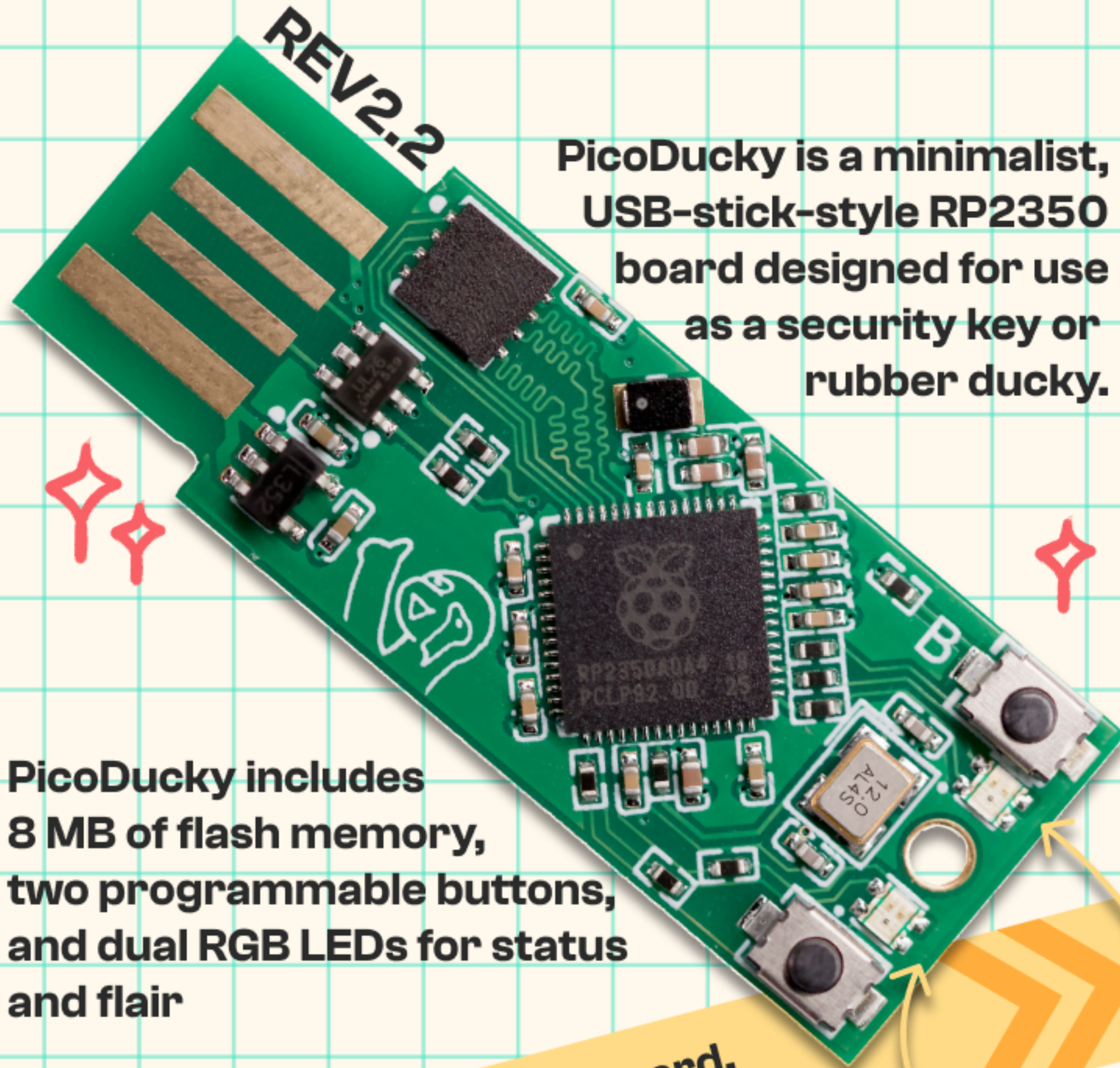


The V3S SBC is a Linux single board computer based on the Allwinner V3S, with MIPI CSI camera input, HDMI video output, microSD boot storage, and USB-C power, in a Raspberry Pi Zero form factor.



PICODUCKY

[Made By Rudy, 17, Toronto]



PicoDucky is a minimalist, USB-stick-style RP2350 board designed for use as a security key or rubber ducky.

PicoDucky includes 8 MB of flash memory, two programmable buttons, and dual RGB LEDs for status and flair

Program it to act as a keyboard, mouse, webcam, heck even a YubiKey



Cool Projects Made By Teens for PicoDucky.

blender thingamajig//

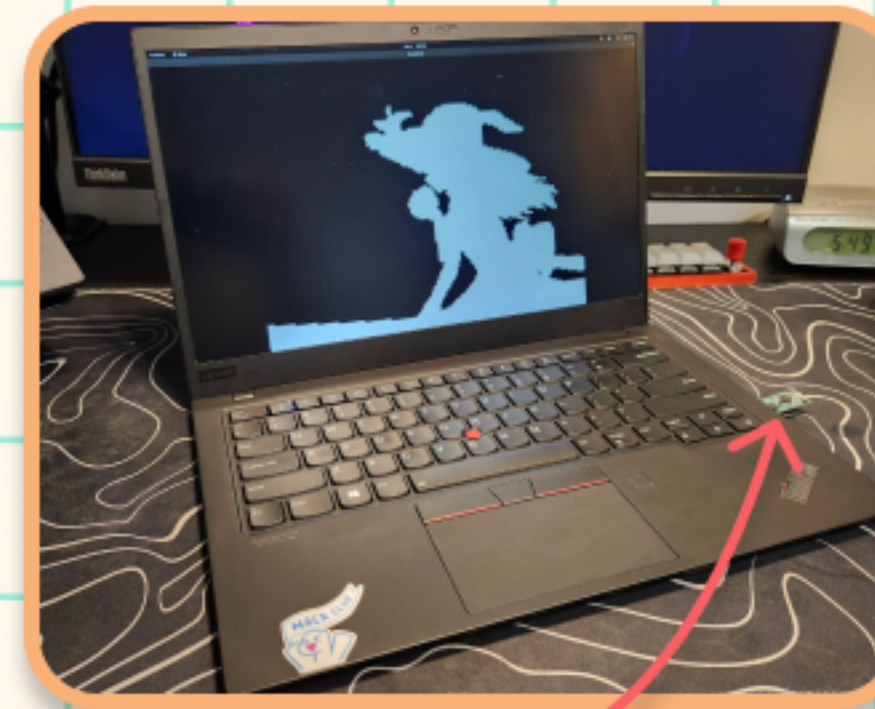
github.com/officialErnests/Blender-thingamajig
Recreates the Mona Lisa in Blender using nothing but a PicoDucky pretending to be a keyboard.



scuffed mona lisa

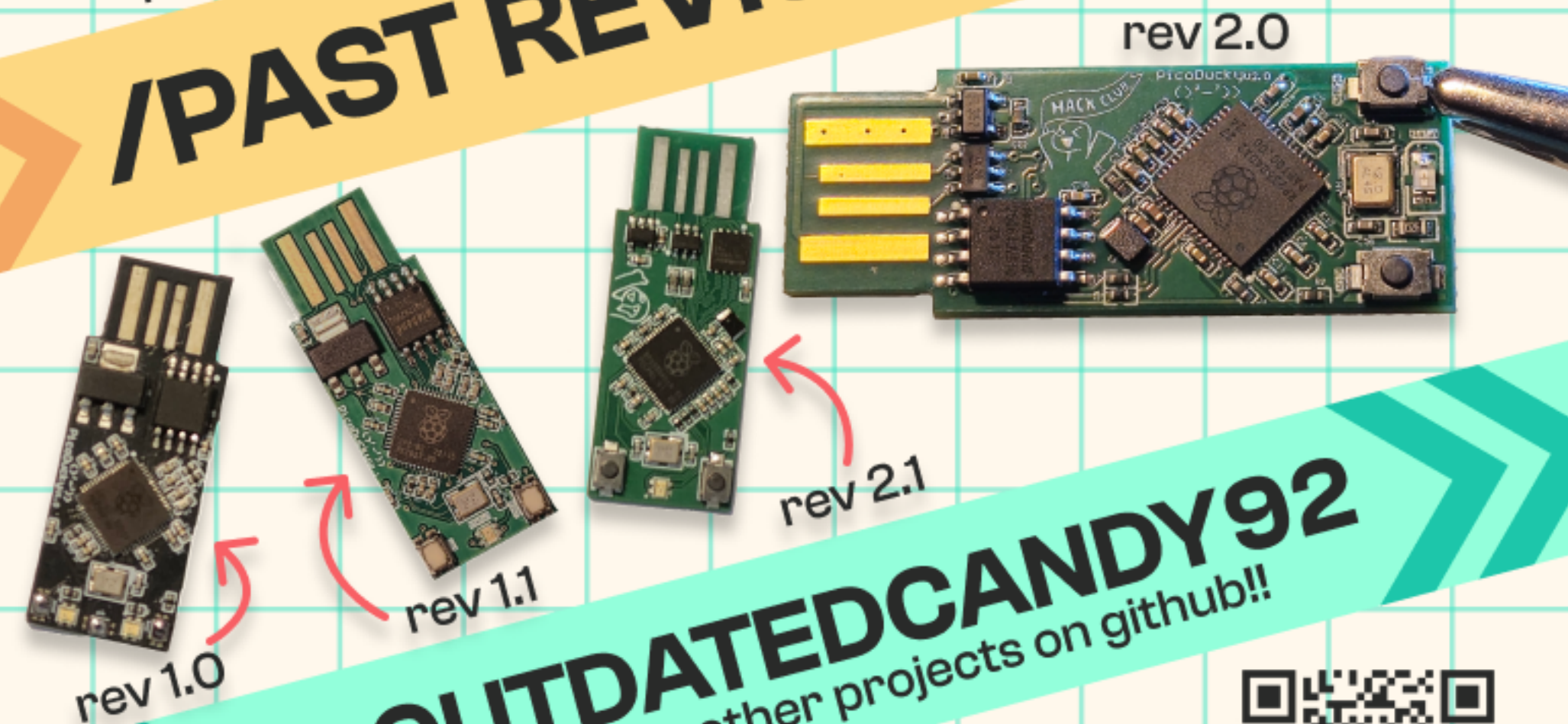
//pd-usb-uvc

github.com/JBlitzar/pd-usb-uvc
Turns the PicoDucky into a USB webcam and streams the entirety of Bad Apple through it.



picoducky!!

/PAST REVISIONS/



@OUTDATEDCANDY92
Checkout my other projects on github!!



ESP-32 Devboard

Made by Toby
(17, AUS 🇦🇺)

Powered by the
ESP32 C3-Mini

i2C JST
Connector

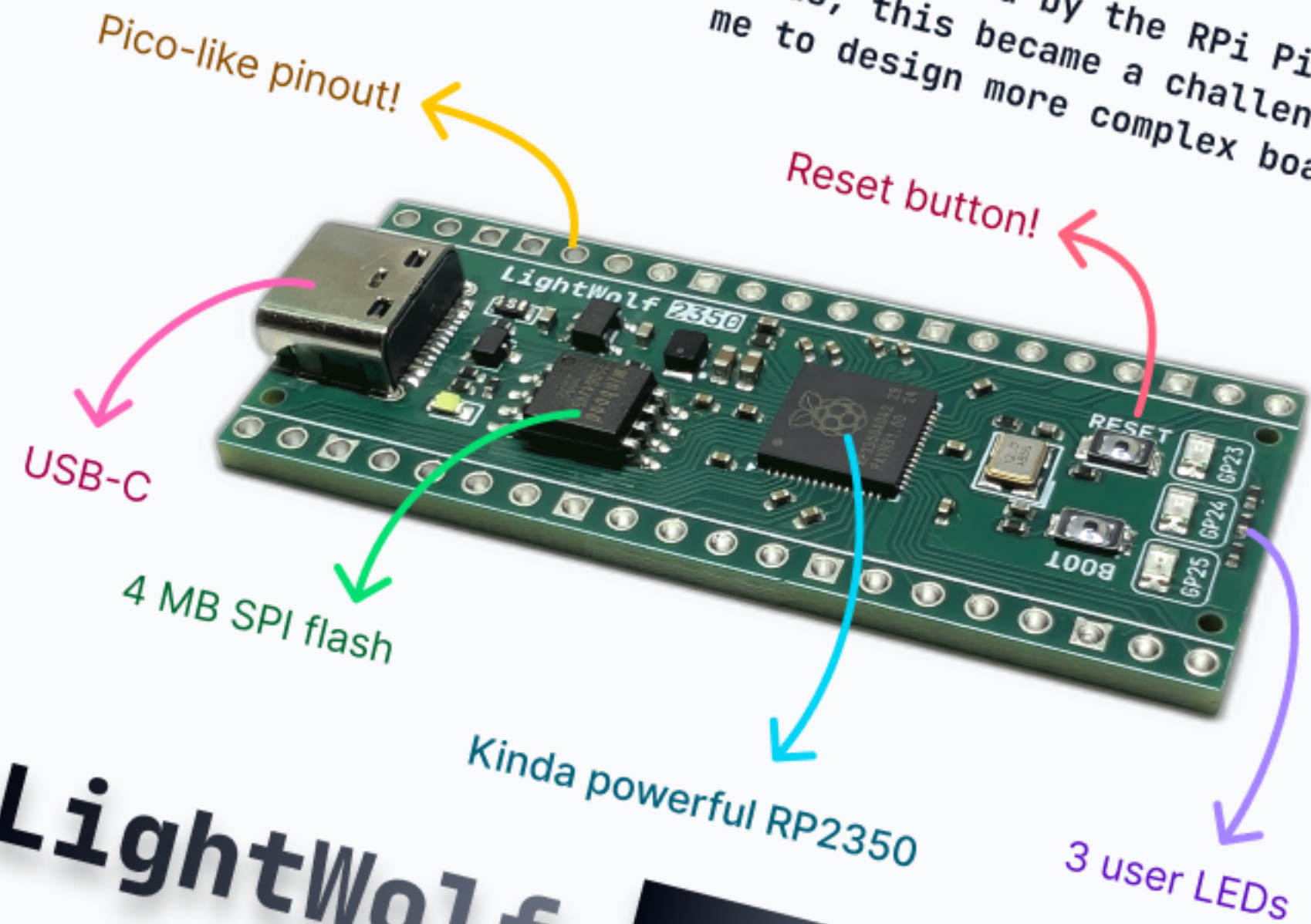
3x Onboard
Adressable
LEDs

Scan Me!

Low-Profile
Inline USB-C
Port



Being inspired by the RPi Pico dev
boards, this became a challenge for
me to design more complex boards.



LightWolf 2350

KiCad Source
Firmware And
Demo:



GitHub
And Source:



SmolPad



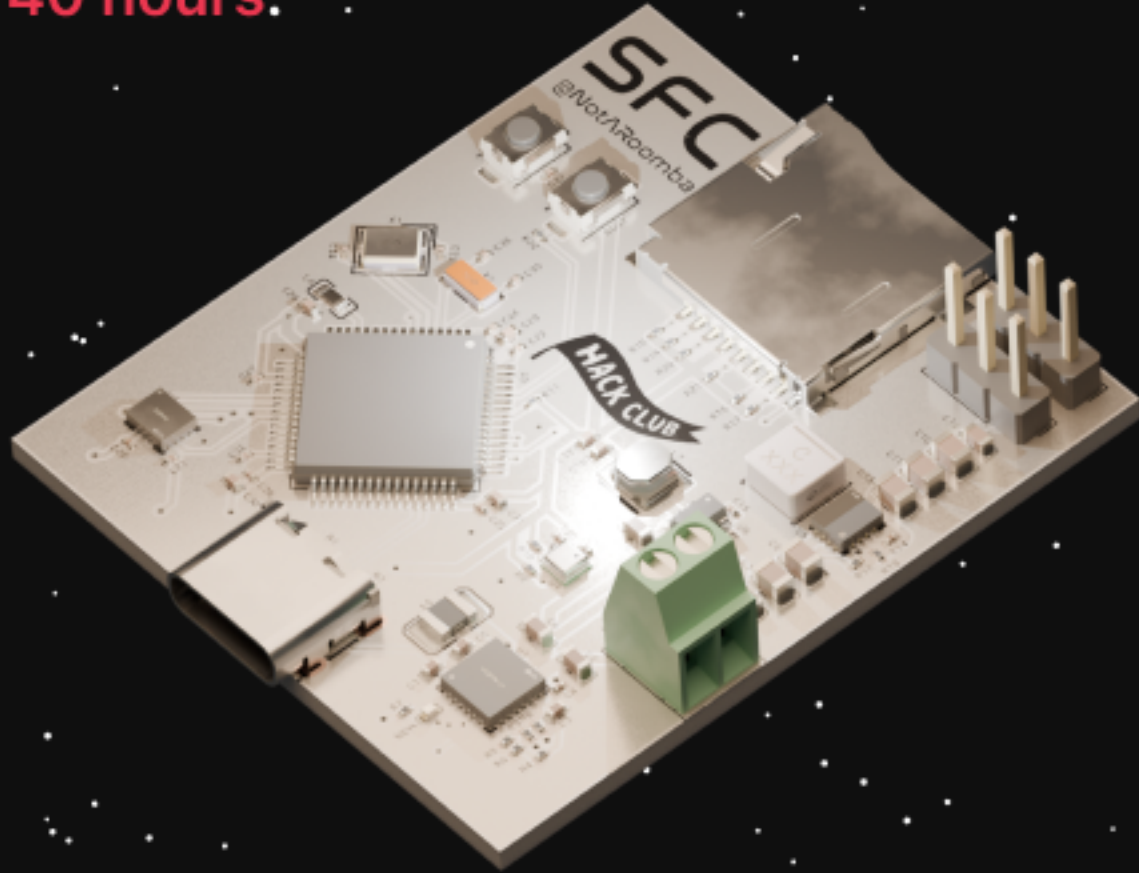
Developer from Taiwan
Wolf Yuan

Hey I'm
NotARoomba

a **full-stack developer** / **hardware magician** who does a bit of **everything**

Simple Flight Controller

This is a **flight controller** / **guide** I
made for Blueprint! It's
completely open source and took
me **~40 hours**.



GitHub



Fun Facts:

- I started making hardware around **a year ago**
- I want to study **Aerospace Engineering**
- I'm taking a **gap year**

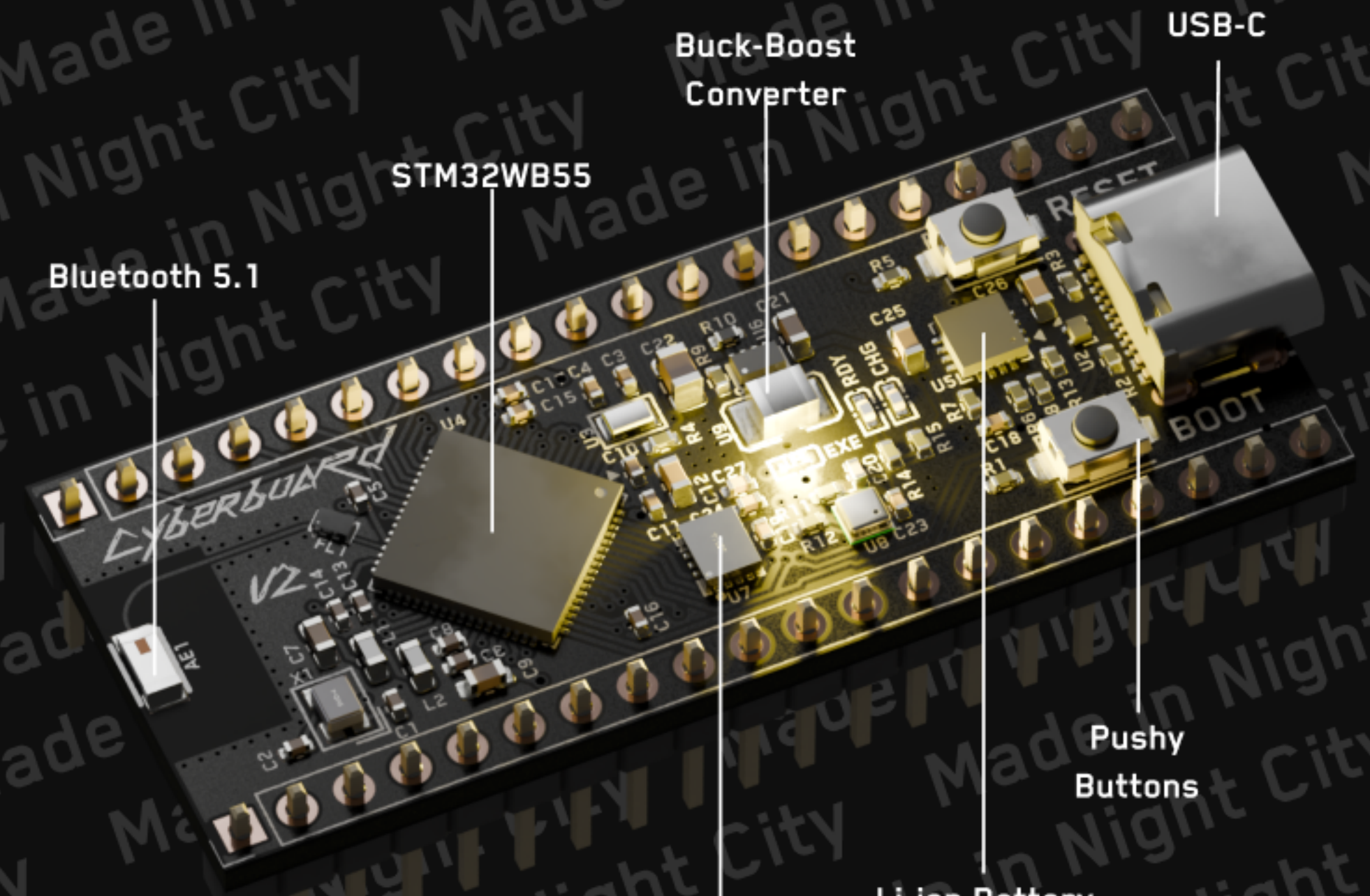


GitHub

CYBERBOARD

An STM32-Powered Devboard

Made by **Nathan Alspaugh** (@notaroomba)



FUN FACTS:

- The previous version functioned as a **hotplate**
- Learned how **not** to make a ground plane
- **Might** work as a flight controller???
- Took **-68 Hours** to make V1 and V2
- **Open source** and on **GitHub!**

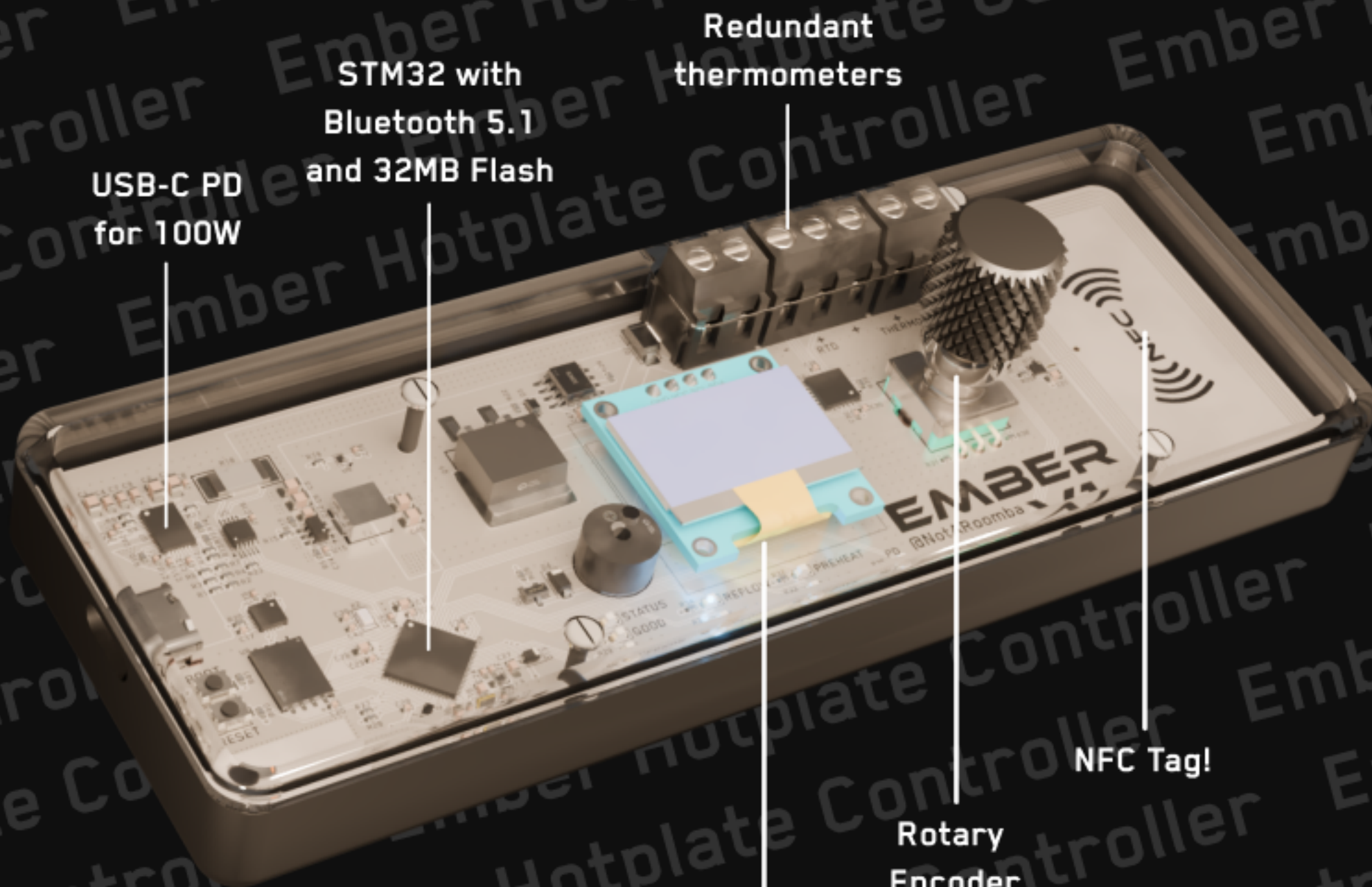


GitHub

EMBER

A USB-C PD hotplate controller

Made by **Nathan Alspaugh** (@notaroomba)



FUN FACTS:

- First project that actually **worked** (first try)
- Learned about the difference between a **thermistor**, **thermocouple**, and **NTC**
- Might run **Doom**???
- Has **NFC** and **Bluetooth** for no reason
- **Open source** and on **GitHub**!



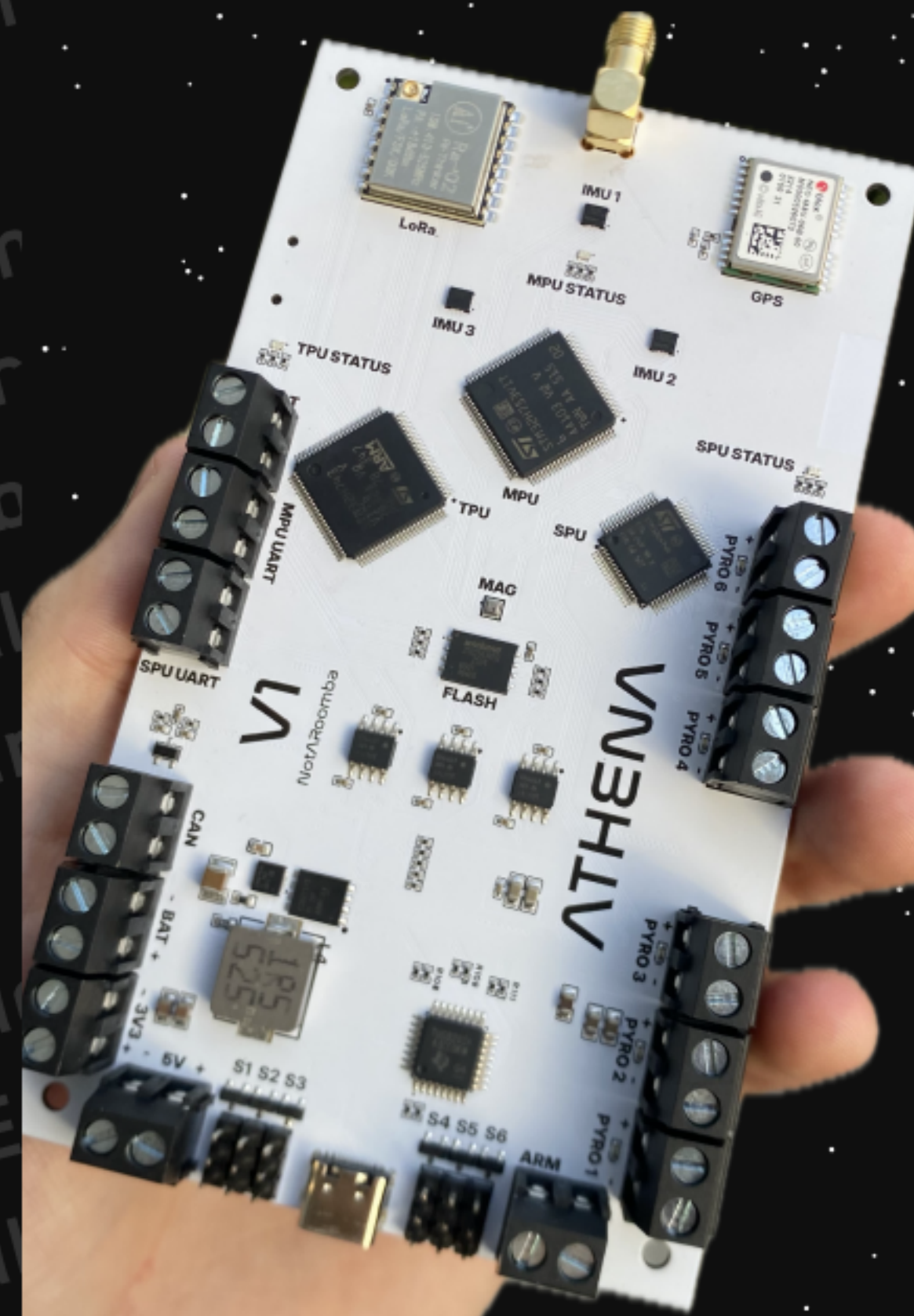
GitHub

Athena

A Triple MCU Flight Computer

Made by **Nathan Alspaugh** (@notaroomba)

STMH753 (**MPU**) • STMH743 (**TPU**) • STMG474 (**SPU**) • 6
Pyro Channels • 6 PWM (**TVC** + **fins**) • 3 × **IMUs** +
Magnetometer + 2 × Barometers • **GPS** • LoRa • **Bluetooth** •
SD + Flash • **7.4V LiPo** + USB-C PD • **6-Layer PCB**

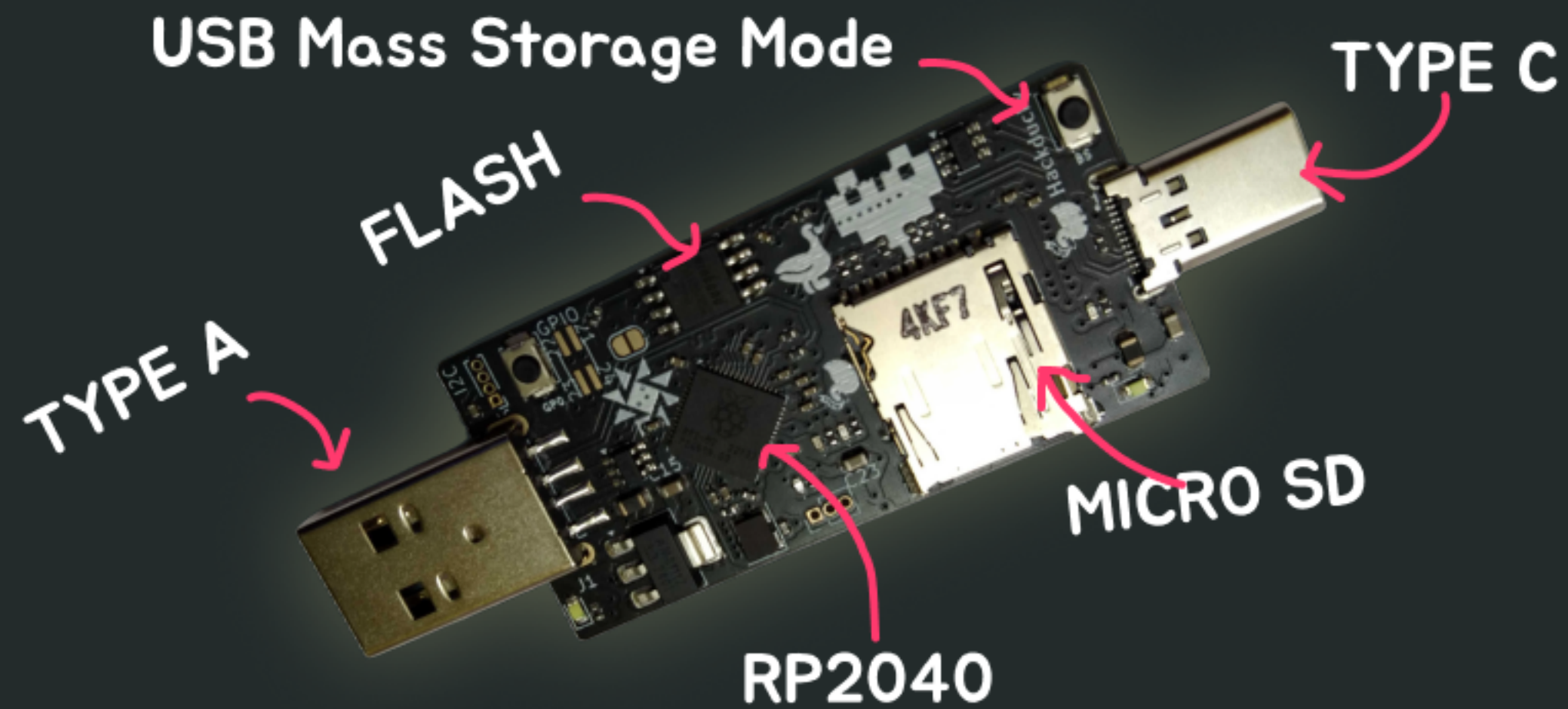


GitHub

Fun Facts:

- Heavily inspired by **BPS.Space's** AVA flight computer
- Learned how to short **GND** and **VBUS**
- Has taken me over 200+ hours so far
- **Second** flight controller I ever made
- **Open source** and on **GitHub**!

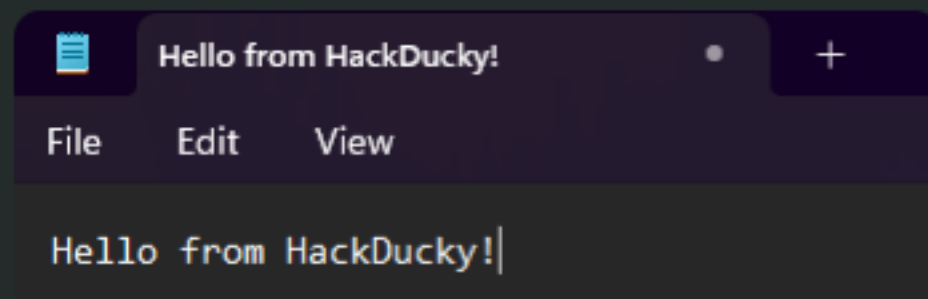
HACKDUCKY



HackDucky is an open source penetration testing and security research device designed For Flexibility and ease of use. Its built-in online compiler lets users test and validate payloads before deployment, reducing trial and error. With 16MB of onboard Flash and MicroSD storage, HackDucky can store and switch between multiple payloads on a single device. The project focuses on delivering an affordable, community-driven alternative while offering Features comparable to market-leading tools.



GITHUB



Small Yet
deadly!



WEBSITE

THE MAKERS 
Aarav Jhamb (Australia) 15
Souptik Samanta (India) 16

Anicet



My custom
FPV drone!
\\(o)/

Fancy way to write 'v4'
This is the fourth time I've
tried to make a drone 🤖

See it fly!
(sort of)



Fully custom
frame +
camera
pivot/gimbal
system!

This is the v4: my very first drone
build! It was more of a learning
experience than a 'real' project, but
I'm proud of it nonetheless. It's
equipped with a 1550mAh 4S battery,
a powerful GPS/compass, a ELRS
receiver/transmitter, and a full
analog video system!



 GitHub!

Took over 90 hours to make!!

Made with care
by Anicetus, 15, Texas

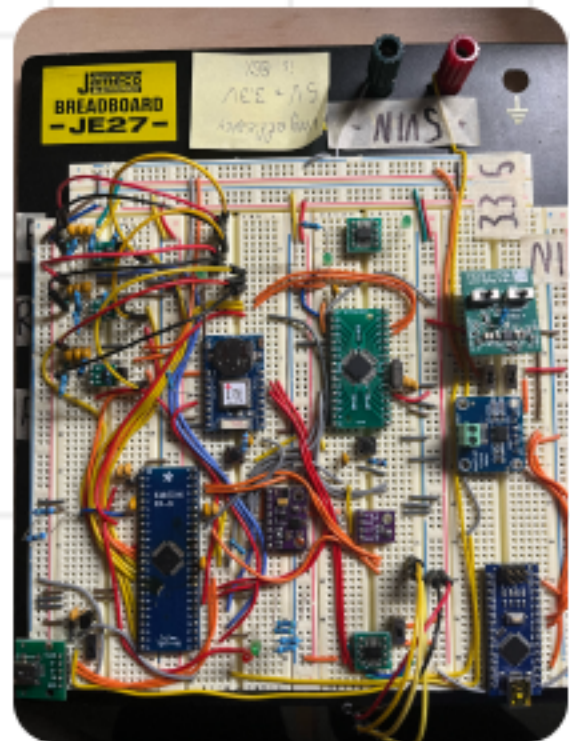


StratoSoar

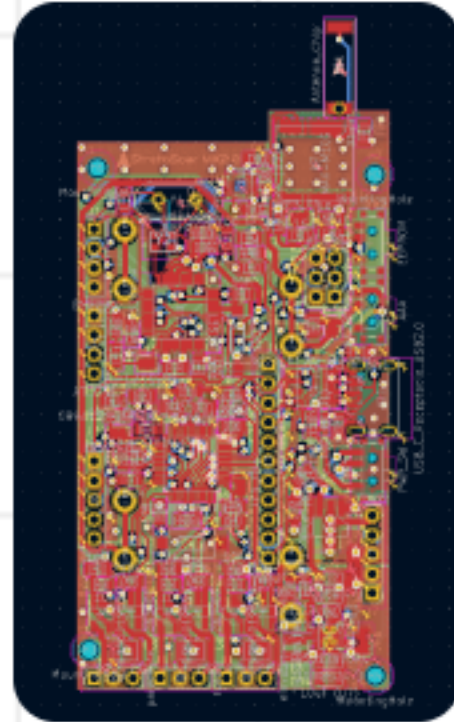
By Charlie Nicholson, 15, USA



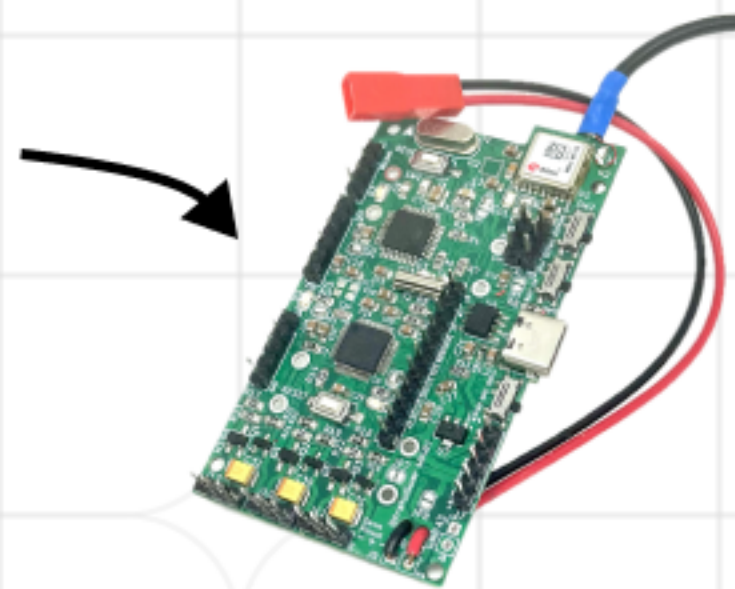
StratoSoar is a low-cost, lightweight UAV designed for deployment from weather balloons. It flies autonomously to GPS coordinates, providing an affordable alternative to conventional UAVs for educators, researchers, and hobbyists.



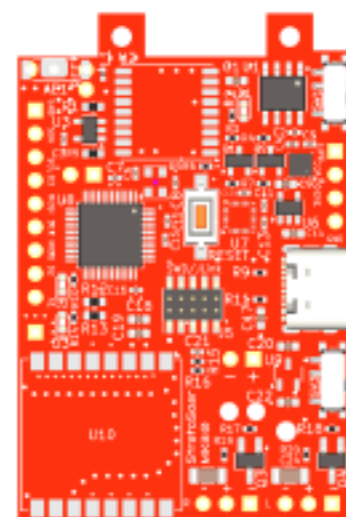
Breadboard prototype



Developing PCB in KiCAD



Product of 8 hours of soldering



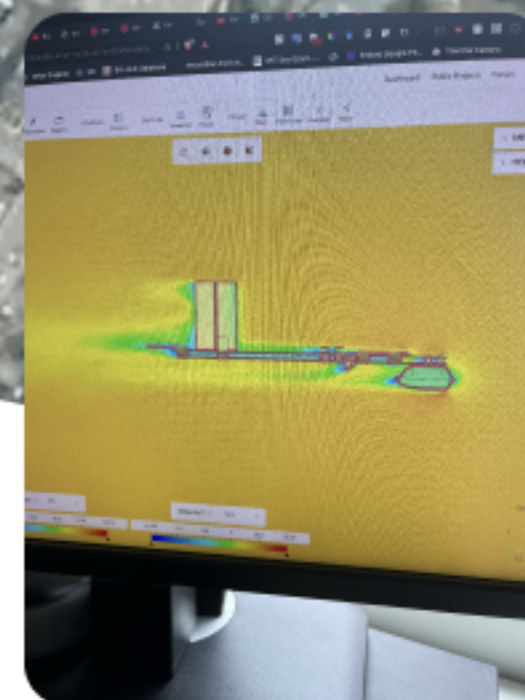
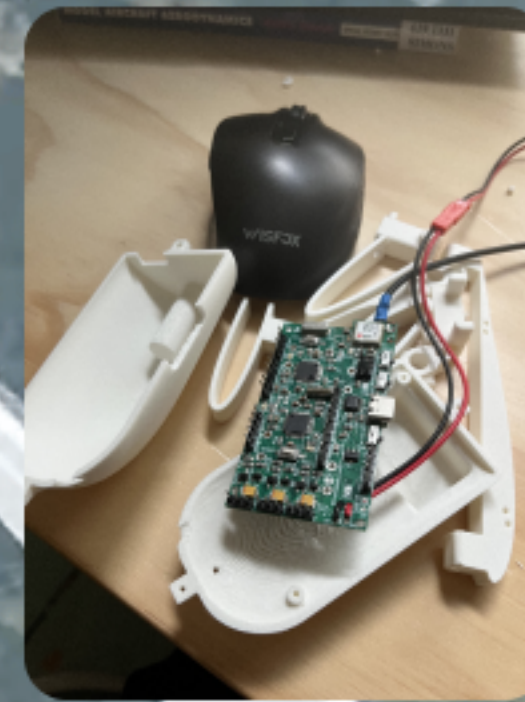
Final of 6 versions

Featuring:

- Dual microprocessors, GPS, LoRa communication, IMU (internal measurement unit), and optional camera
- Custom mesh network communication protocol
- Insanely low battery consumption (20 hours of use on one 300 mAh battery)
- Low cost (\$150) in comparison to others (\$5K - \$20K)



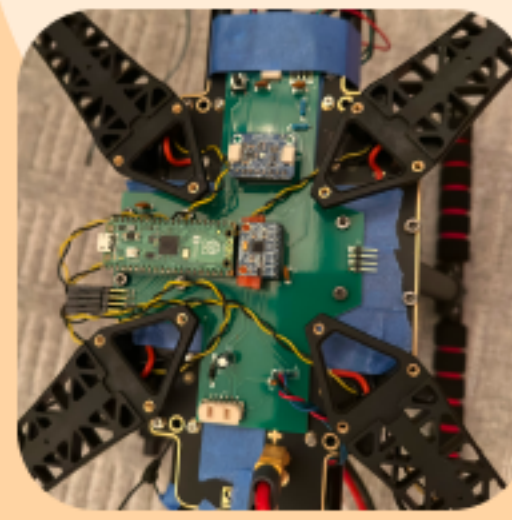
See my GitHub!



StratoSoar, but on a weather balloon

TacoCopter

Flight Controller from Scratch in Rust, on a Raspberry Pi Pico 2



Made in 180 Hours by Nicholas Fasching (17, US)!

Configurator



- **Desktop App** to Control the Flight Controller over USB!
- Built in **Rust** w/ Tauri
- View Sensor Data
 - IMU Readings
 - Controller Inputs
- Calibrate Sensors
- Download Logs

What's To Come

- Stereo Camera Mapping and Obstacle Avoidance w/ a Jetson Orin Nano
- Realtime FPV Camera Feed
- PCBs and 3D Printed Parts

Video Demo



Learn More!



Features

- Overclocked to 300 MHz
- Control Loop Runs at 500 Hz
- 7+ Fully Custom Drivers
- Many Features
 - Drone Acro/Rate Mode
 - GPS Reporting
 - Altitude from Barometer
 - Battery Monitoring
 - ELRS Radio Protocol
 - DShot Protocol
 - Onboard Data Logging (Blackbox)
 - Persistent Settings
 - Detailed Telemetry

Hyperion Engineering

By Blake Mangum

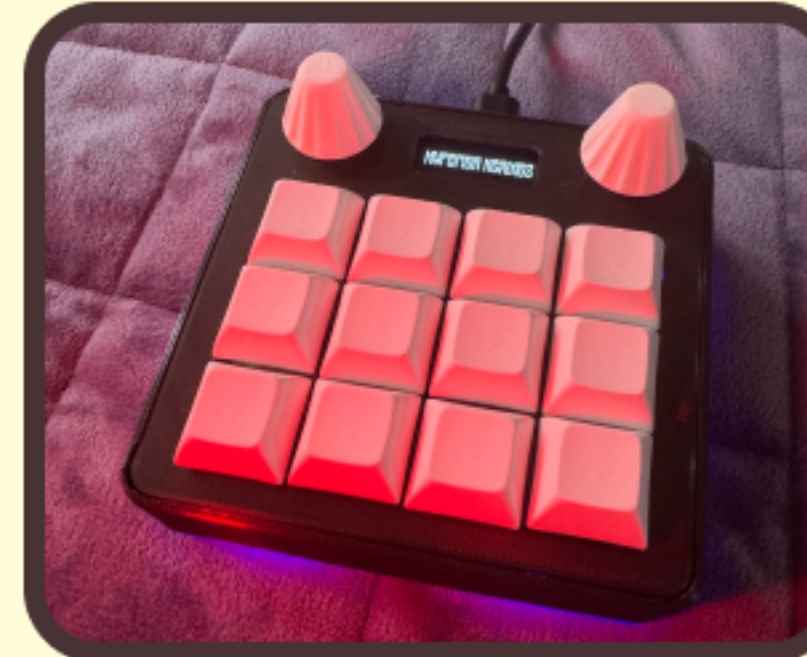
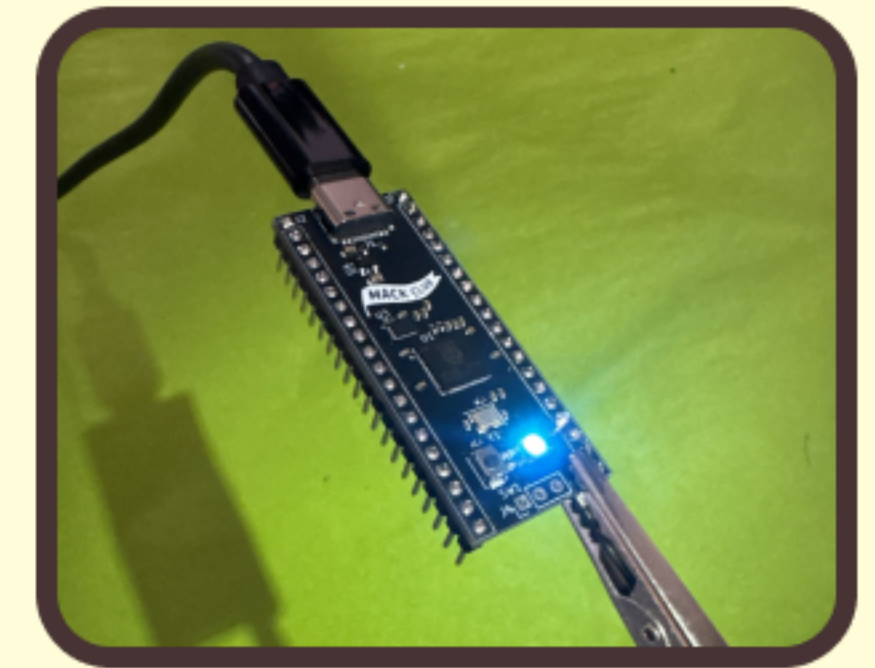


Red-Ryder Rocket ~ 12 hrs

A simple, low-budget model rocket made from a handful of 3D-printed parts and half of a paper towel roll. I used a program called Open Rocket to make sure that the rocket would fly well. The nose cone has a cavity large enough for some telemetry too!

Hyperion Micro ~ 15.5 hrs

A simple Dev Board that I made for Hack Club Blueprint. It has everything that I would want on a Dev board. 29 GPIOs, 9 pins for ground, 5 pins for power 3&5V 16 mb flash memory and a USB-C Port for data & power. First pcb designed ever.



Hyperion Hermes ~ 17 hrs

A macro pad built for seamless multi-platform use (fusion 360 and DaVinci resolve), featuring an integrated OLED to display mode changes and custom graphics, along with LEDs that provide clear visual feedback and ambient lighting for each mode.

RedRyder



Dev Board



Hermes



CHRISTMAS LIGHT SHOW

My name is Zayden and I'm from California, USA. I built a Christmas light show with 5000 glorious WS2811 pixels all synced to Christmas music.

I have spent over 400 hours working on this project, from planning to building to programming. This is the second year I have had this project up, more than doubling the pixel count from last year.

The total BOM is currently over \$5000, and I just bought another 5000 pixels for next year.

I love seeing the excitement on the faces of those watching the show. All you have to do is drive up, tune your radio, and enjoy!



RC-Tank

Nico, 14

Boston, MA

An RC car (previously a tank) that uses a cellular connection for unlimited range!

Control website uses camera to let you fully control it from anywhere in the world!

- Unlimited range
- 6 mile battery life
- FPV camera
- WebRTC video
- Headlights
- GPS



Parts:

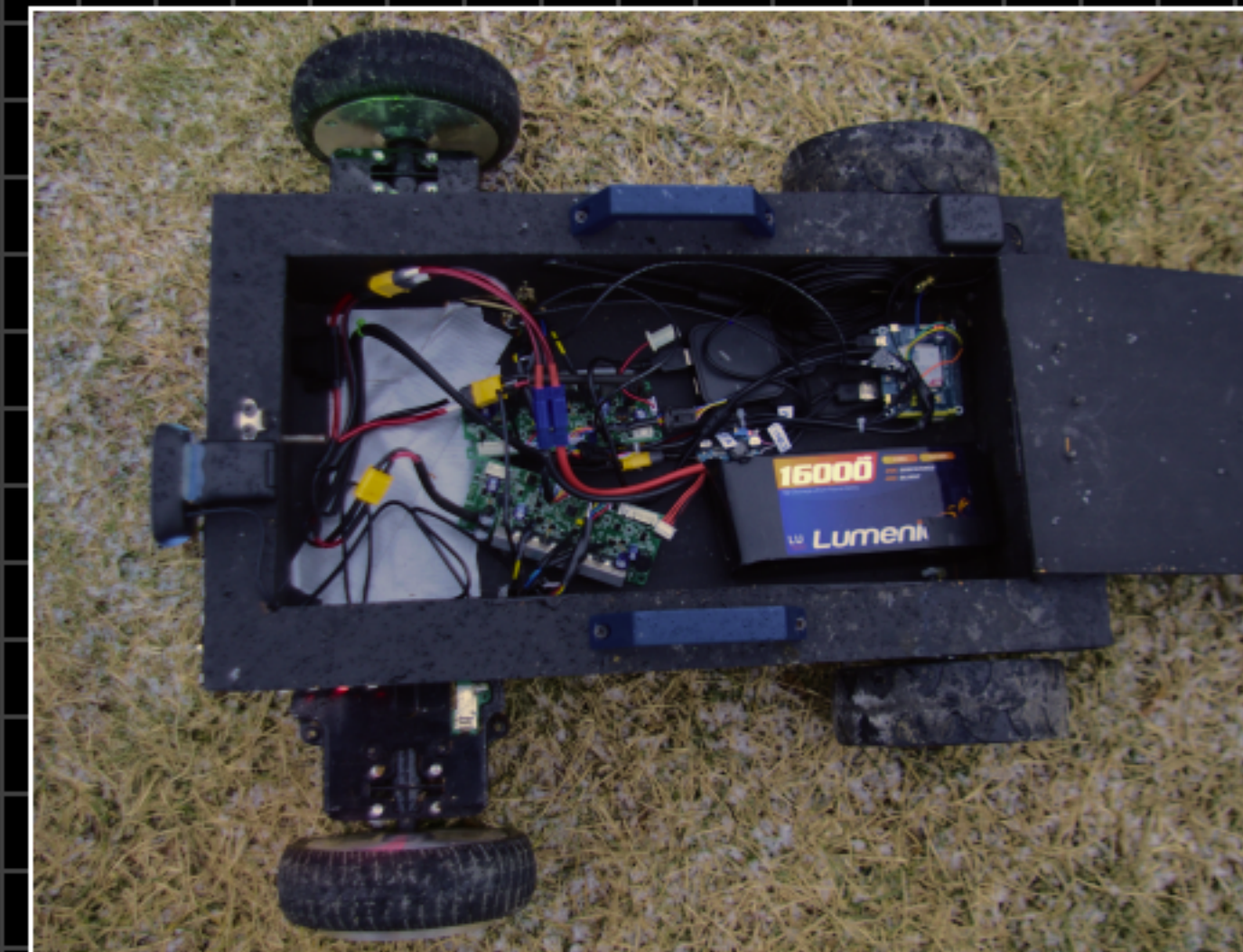
- Old Hoverboard
- RPI Zero 2W
- Cell Modem
- Webcam
- Neopixels
- Buck converter
- 4S Battery



Youtube Video



Github Repo



Check out the
GitHub!

Or watch the
full show on
YouTube!





link
repo

inspired by
my ♥ for
craft flowers



Flower



closes



when you're far

opens



when you're near

akshara, 17, singapore

sensor
arduino
servo



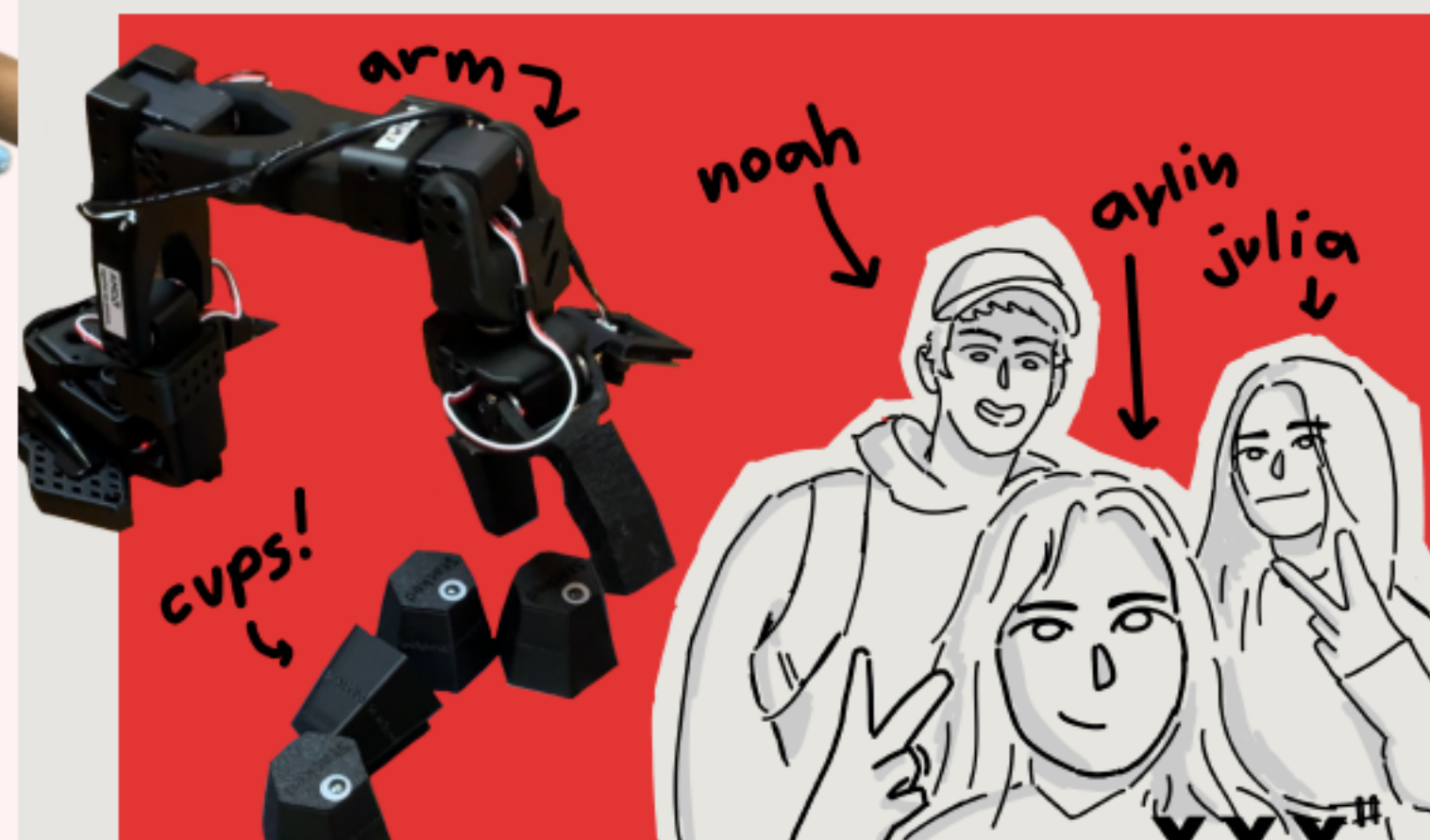
demo



link

"so...what are we making again...?"

created by team 22, "DIVORCE!" @prototype, CA :)



STACKED

julia do (17), noah walsh (17), aylin acosta (16), USA

& team mascot heihei



a cup-stacking
Hugging Le
Face robot arm
trained with AI
& A LOT of
episodes

cups designed
in Onshape



WHOOOO!!

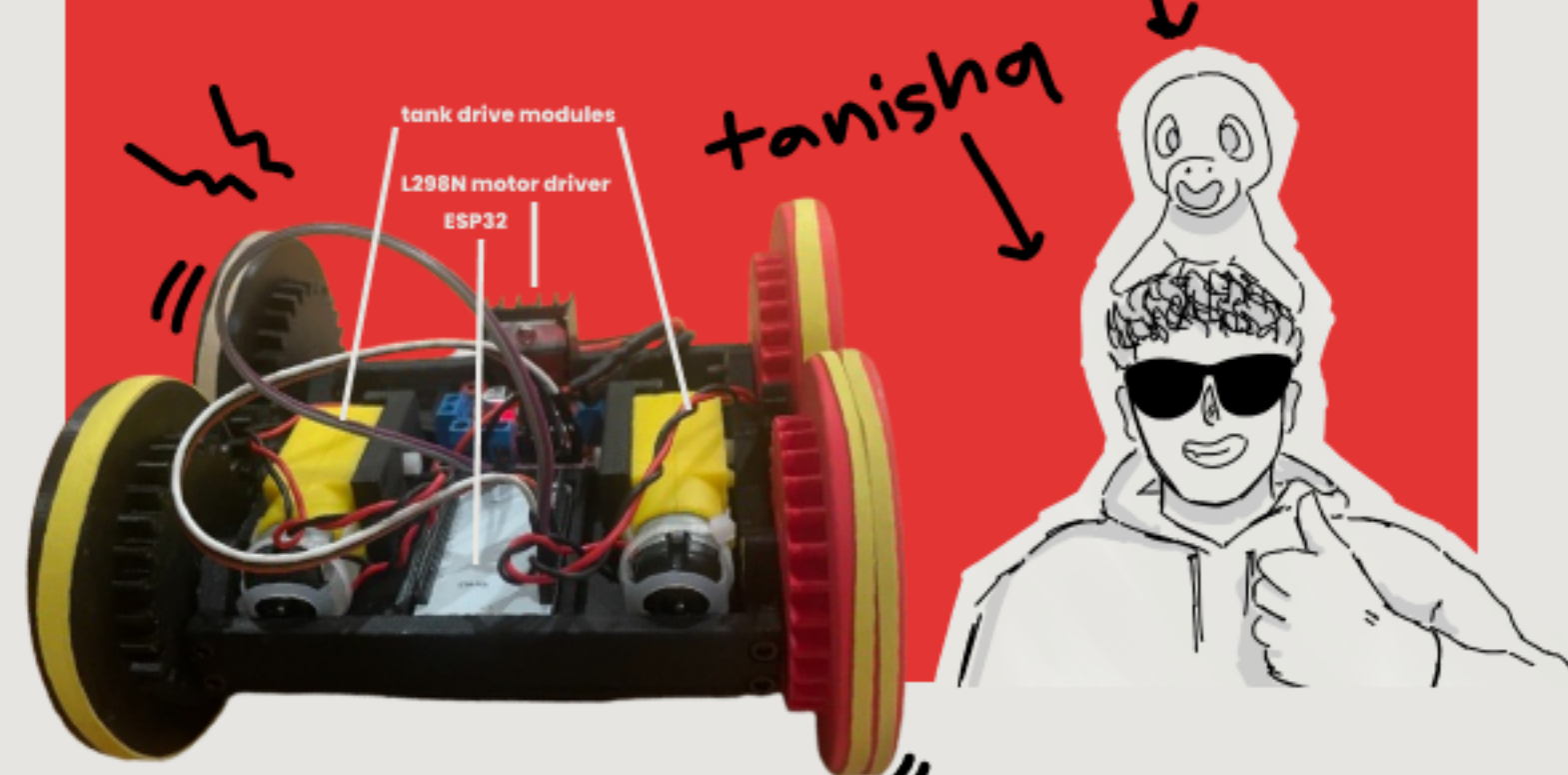
an affordable, beginner-friendly alternative to XRP.



tanishq goyal (15), USA

MY FIRST ROBOT

so fire!!



a beginner-
friendly low-cost
mini robotic car
using tank drive,
ESP32, an L298N
H-Bridge motor
driver, and a
3D-printed
chassis!

||:FiddleStein:||

Repo & Demo!

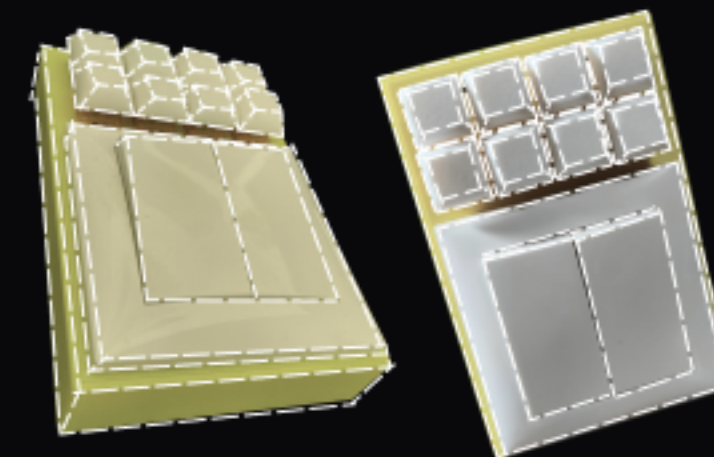


FiddleStein is a prototype for a fully self-playing violin, made for Hack Club x AMD's in-person hackathon Prototype. An AI-powered S0101 arm drives SG990 servos to create a fully functional "smart" violin that requires zero human input to play. Created by Udo Funke, Max Goldberg-Spar, and Sidd Naidu.



SwitchPad & Clonetroller

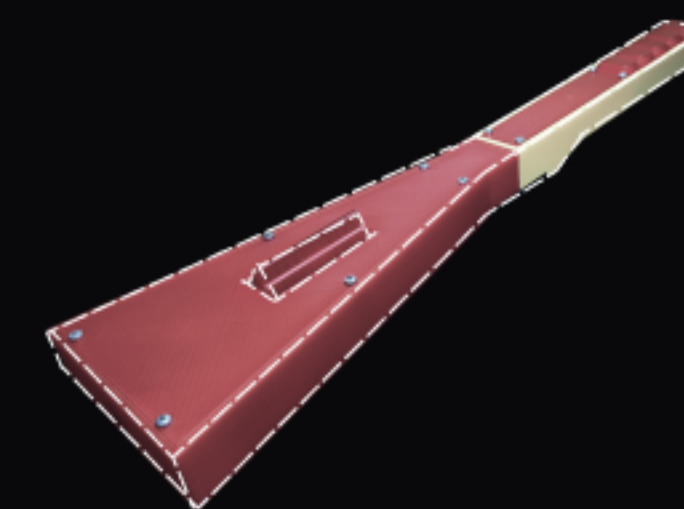
<<=== repo ===>>



The SwitchPad is a 2x4 macro pad with a light switch included. Powered by the Raspberry Pi Pico 2 and programmed with KMK.

===== repo =====>>

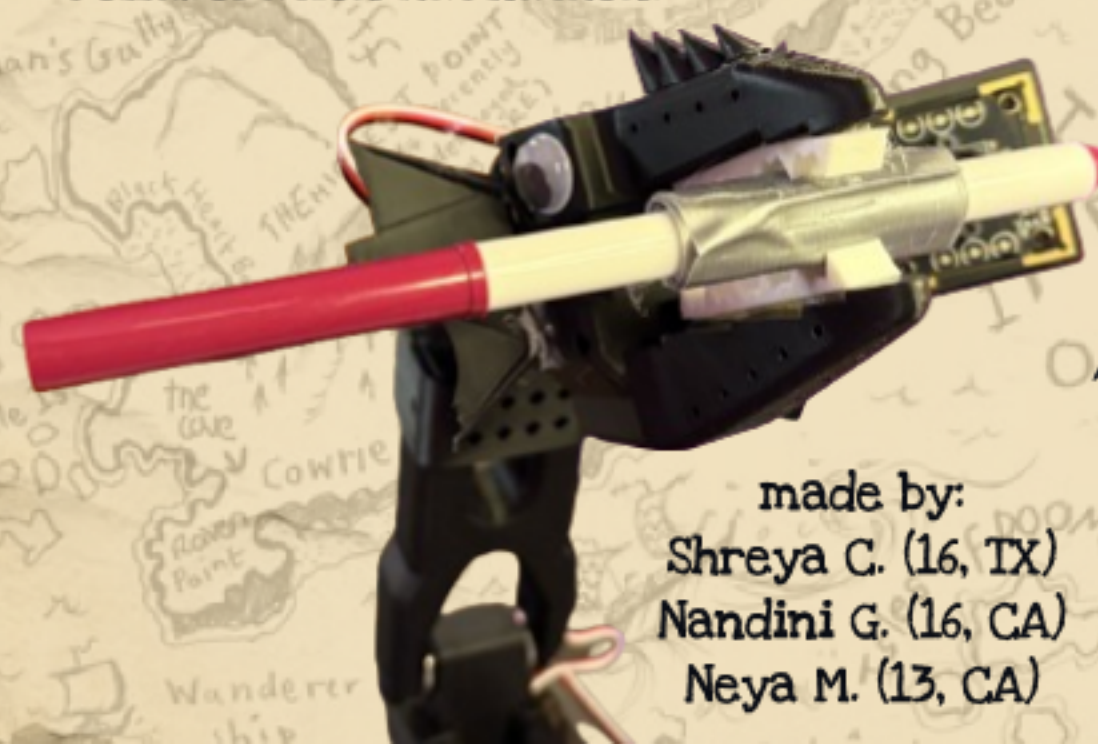
The Clonetroller is a Guitar Hero controller that is 90% 3D printable (the other 10% is electronics), powered by the Pi Pico 2 and made for Cherry MX switches.



===== Made by Andrew (15yrs old, Romania) =====

meet: Toothless...

... a robotic dragon who draws! He picks up the pen from the cup in the center, turns his head, draws on the paper (on the left of the aerial camera picture), drops the pen back into the cup, and returns to his starting position. We trained him with the RobotStudio S0101 Arm and AMD'S Developer Cloud at Prototype, a Hack Club x AMD collaboration hackathon!



custom 3D-printed accessories!

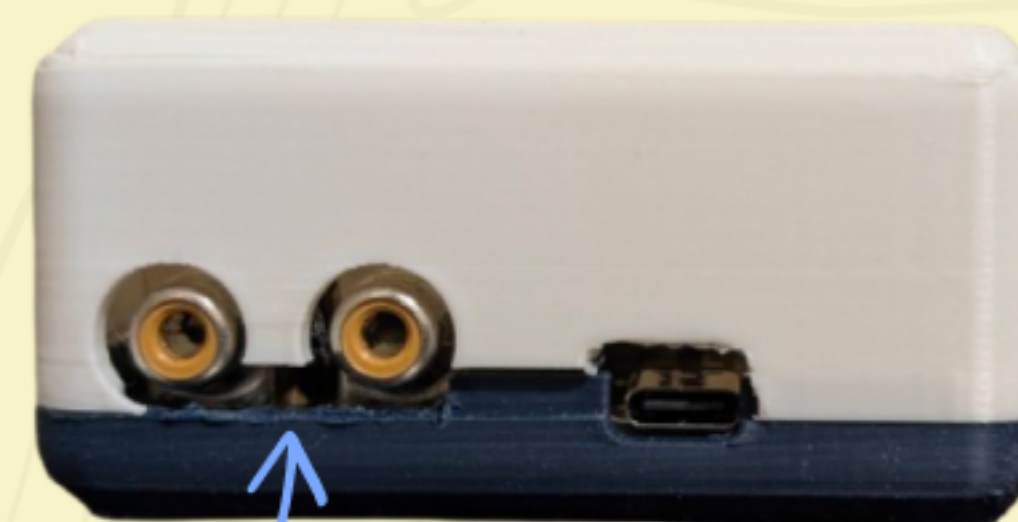


github

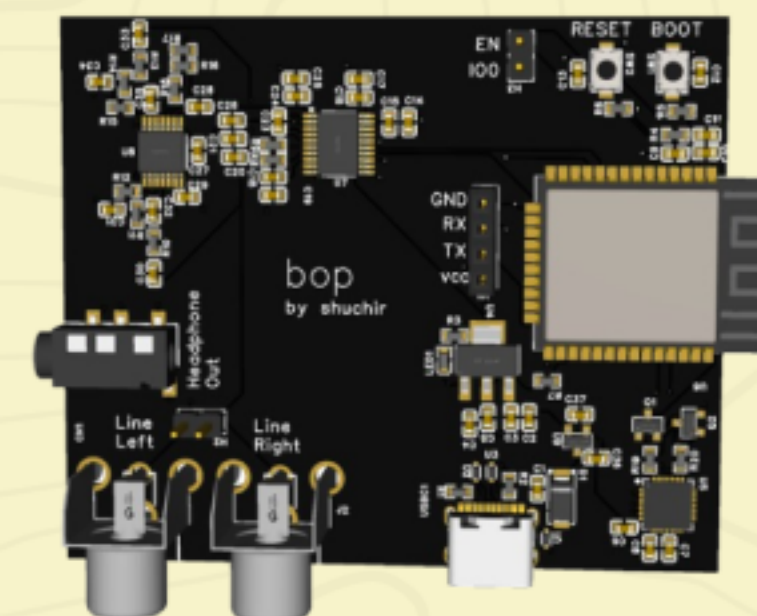


made by:
Shreya C. (16, TX)
Nandini G. (16, CA)
Neya M. (13, CA)

one of Toothless' masterpieces :3



dual RCA output



play CD quality audio on an old stereo system from your device over Bluetooth!



make wired earbuds wireless with the built in headphone jack!

By Shuchir Jain
17, US

organizers' note



acon

it's only been a month from start to end of creating the magazine. i can't believe we pulled off such a huge project (including project contribution from 100+ different people)!!

huge thanks to the team - gideon, valen, lilia - these are the best people that could've been chosen to help, and i'm infinitely thankful that they've been here along the way. the magazine would not have finished on time otherwise!

want to connect? email me at acon@hackclub.com :D



aconlin.com

19, Canada 🇨🇦

valen

i'm glad I got to be a part of the magazine!! i'm really happy with what we've achieved together and i've honestly had a great time helping with it (even if that involved staying up late doing reviews and scanning a thousand qr codes 🥱)

i also want to say thank you to the rest of the team - it's been awesome working with you and yall are really cool people. I hope we can work together in future projects :D



valen.zip

16, Argentina 🇦🇷

gideon

making this magazine was so rewarding since the quality bar was so high - i had so much fun seeing such a range of unique ideas and trying everybody's projects! sometimes a little too much fun...

i'm so grateful to everyone that helped make this magazine possible, both organisers and all the hack clubbers that helped design their own sections. watching every piece of the jigsaw slide into place felt amazing & it wouldn't have been possible without every one of you ♥

side note, acon's the best ;)



gideon.sh

16, United Kingdom 🇬🇧

lilia

this magazine was an amazing opportunity. and the greatest part is that it all just started with one simple message. who knew that simply offering to help could lead to such a remarkable opportunity. working together to build this project. i'm so happy to have been apart of this, working with some of my favorite people in hack club

acon, gideon, and valen...thank you for letting me be apart of this. also, thank you to everyone who submitted their projects. without your projects, this magazine wouldn't exist



lilia.rocks

17, USA 🇺🇸





David

Raj
ANIKETVS
Johnksh

Danny

mini
SHREYA

Allen

Toshit

Hariz

Shamshari

Maiguel

Arca

Bunnyguy

Samplix

Aditya

Lola

Gideon

Allen

Shamshari

Maiguel

Arca

Bunnyguy

Eshall

Alex

ONIKO

Lola

Gideon

Allen

Shamshari

Maiguel

Arca

Bunnyguy

Eshall

Dhyan

ONIKO

Lola

Gideon

Allen

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Gideon

Allen

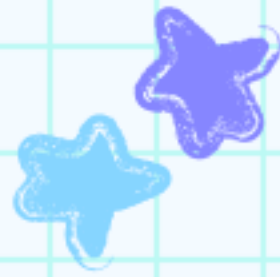
Shamshari

Maiguel

Arca

Bunnyguy

Eshall



In 2025, teenagers across the world created amazing projects.

Games with fun twists; apps, sites, and everything in between; keyboards, cyberdecks, devboards, 3d printers, and so much more.

This magazine has two parts: the first is a collection of Hack Club events that were run throughout 2025, and the second showcases over 150 unique projects made by Hack Clubbers!

made with <3 by teenagers from all around the world.

SOFTWARE



HARDWARE

GAMES

