

Assembly Slides:



IoT Cat Lamp

Presented by: Michael Raymond

The cutest mostly secure IoT lamp.



About the Speaker

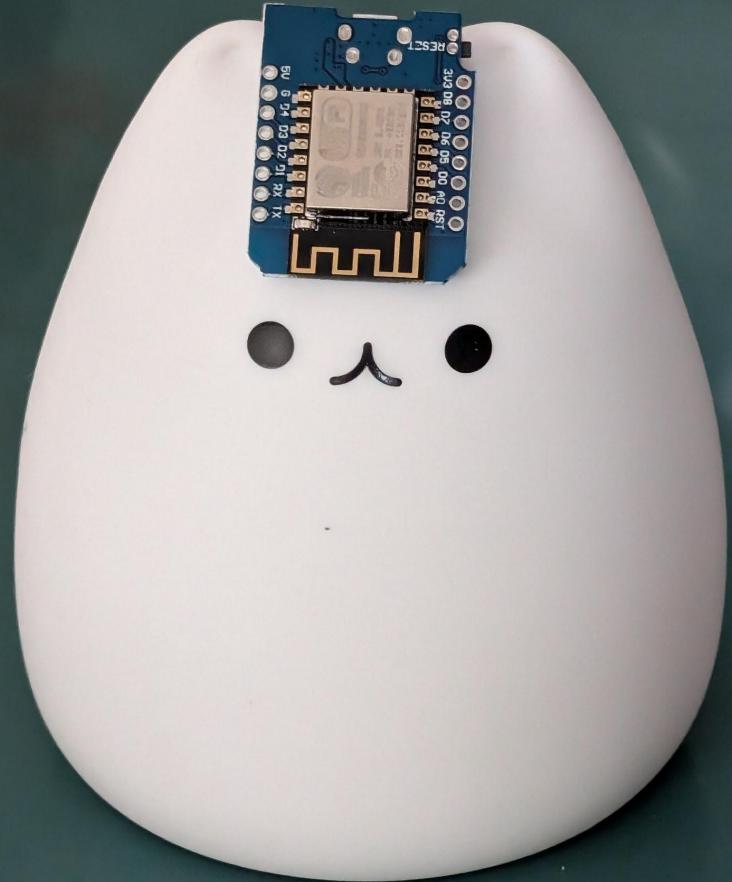
Michael Raymond

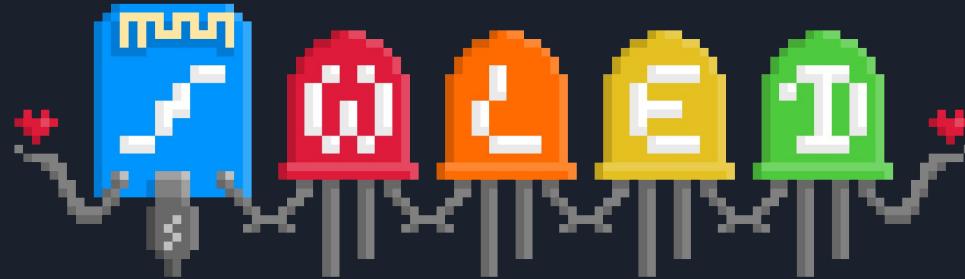
- Ethical Hacking on Hak5, Null Byte, and SecurityFWD
- vCISO
- Interests
 - Home Automation
 - Aerospace ADS-B
 - SDR Radio Hacking
- Mountaineer



About the Project:

- Learn how to solder
- Assemble the PCB
- Setup your WLED lamp
- Enjoy!





- Open-Source LED Control
- User-Friendly Interface
- Integration Capabilities
- Dynamic Effects
- Community-Driven

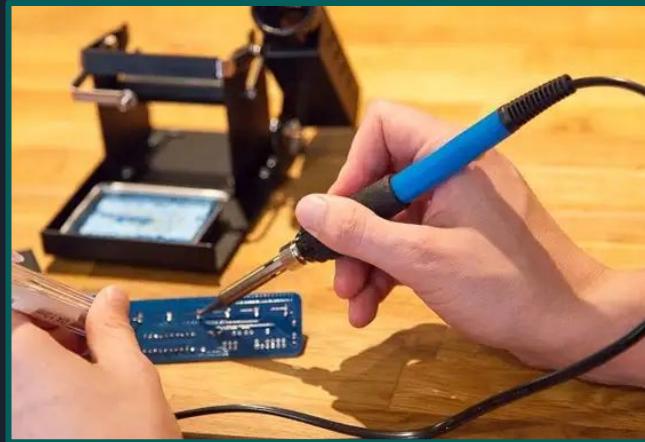
Soldering Safety

- Never touch the soldering iron element; it can reach temperatures of 750°F.
- Don't breath in the fumes.
- Wash your hands after.



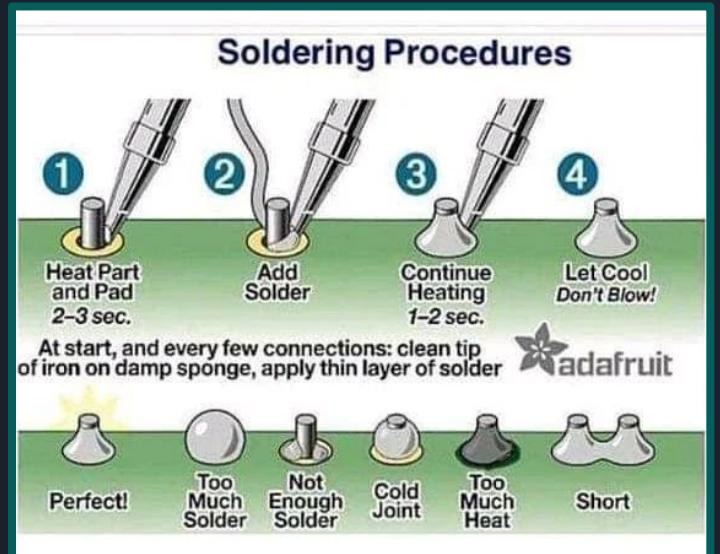
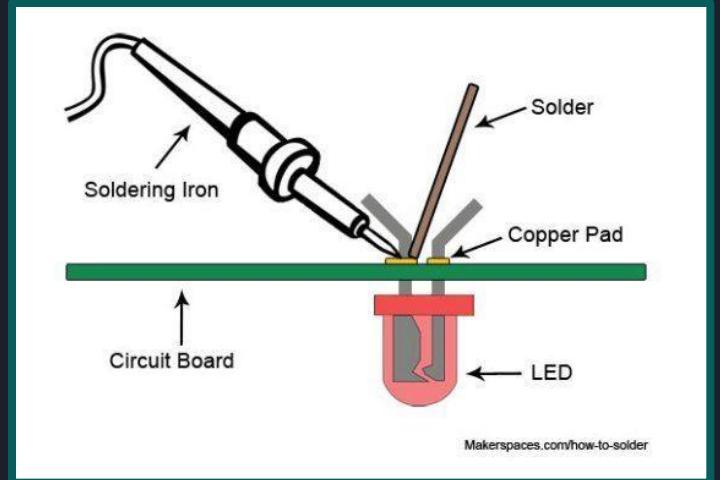
Holding the Soldering Iron

- Your iron is incredibly hot, only hold the handle
- All of the metal parts in the front get hot: NOT just the tip



Soldering Correctly

- Careful not to use too much solder
- Using too much solder will cause multiple pins to bridge
- If you do end up using too much, ask for help
- Too little solder will cause it to not make an electrical connection



Cleaning your iron

- Keep the cleaning sponge wet while using the soldering iron
- If the soldering joints look messy or the soldering tip looks to be dirty, clean it on the wet sponge

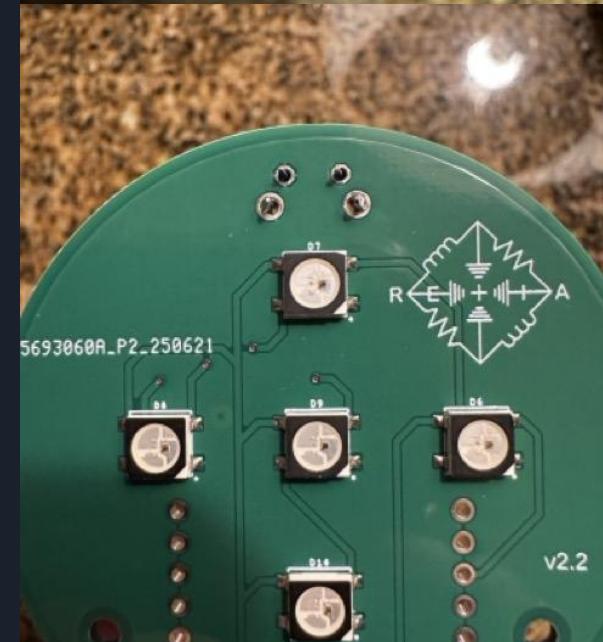


Solder D1 Mini to the PCB



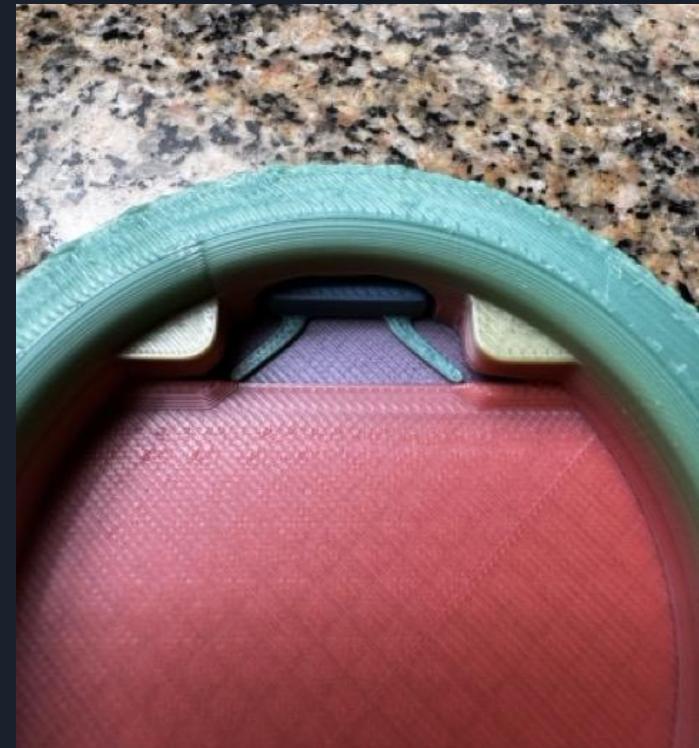
Solder the Button to the PCB

Button is placed opposite the LEDs



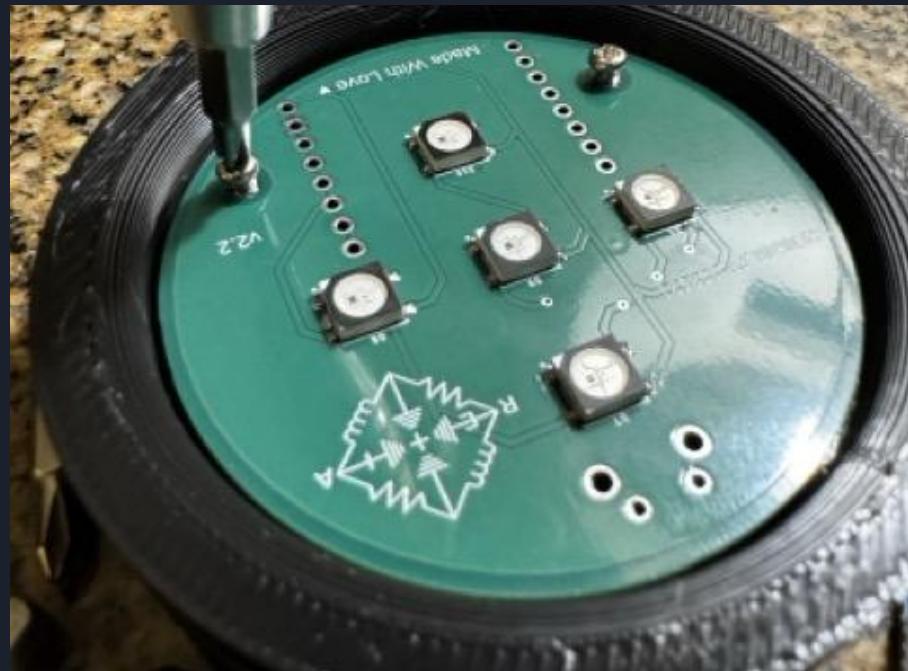
Insert Button Cover

Slide the button cover into place, and ensure both legs sit flush and flat



Assemble the Base

Slot PCB into place and screw tight

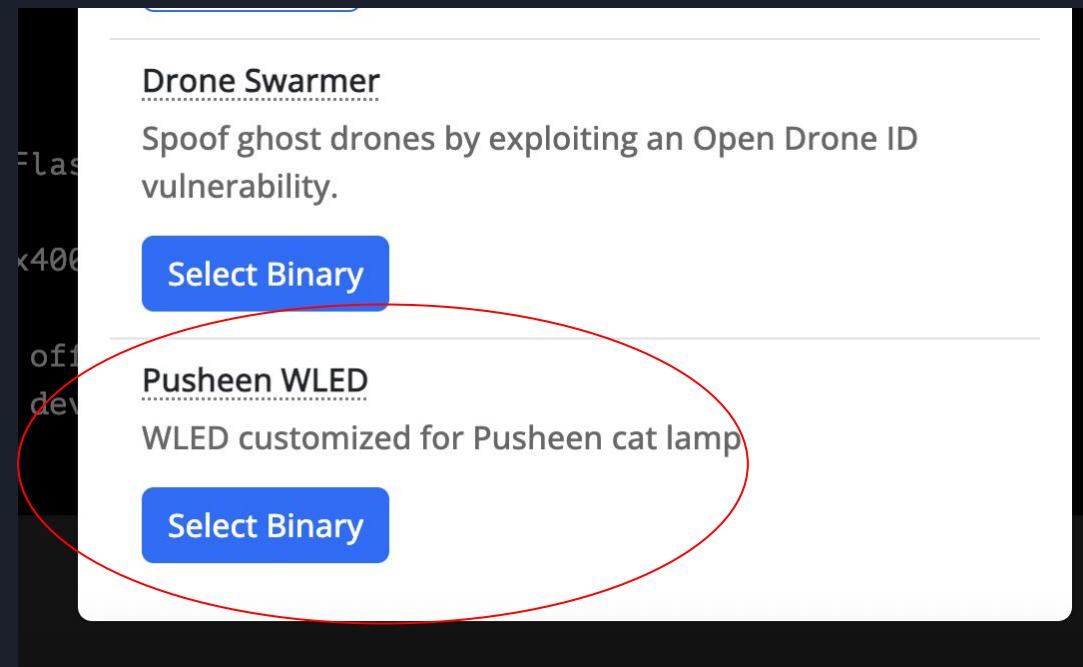




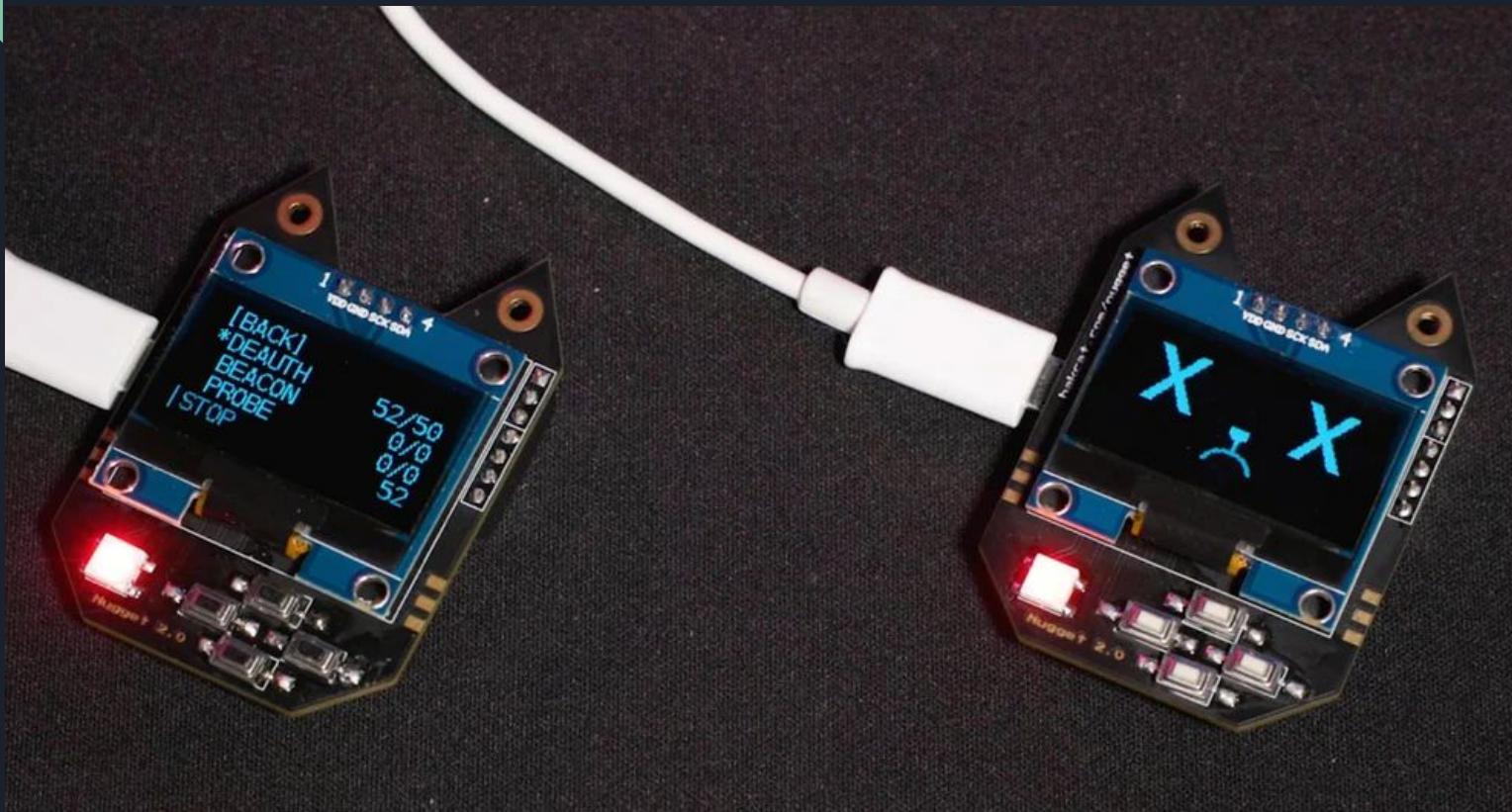
Install WLED

Select “Pusheen WLED” from the drop down menu

<https://nugget.dev>



Wi-Fi Deauthentication Attacks





Pusheen Guardian

- Looks for Deauthentication & Disassociation
- Changes Color when over 5 per second

Pusheen Guardian Wi-Fi Jamming Detector

Wi-Fi Deauth & Disassociation Detector for the ESP8266
Pusheen

Select Binary



It's ALIVE!!!!

Use any wifi-equipped device to connect to the newly created network "Cat Lamp"

If the sign in page does not pop up then in your Browser go to 4.3.2.1



Basic Animations

The screenshot shows a software interface for managing light effects, likely for a smart LED strip or matrix. The top navigation bar includes icons for Power, Timer, Sync, Peek, Info, Config, and PC Mode, along with a brightness slider.

Effect mode: A list of available animation effects:

- Solid
- Android
- Aurora
- Blends
- Blink
- Blink Rainbow
- Blurz
- Bouncing Balls
- Bpm
- Breathe
- Candle
- Candle Multi
- Chase
- (Aurora)

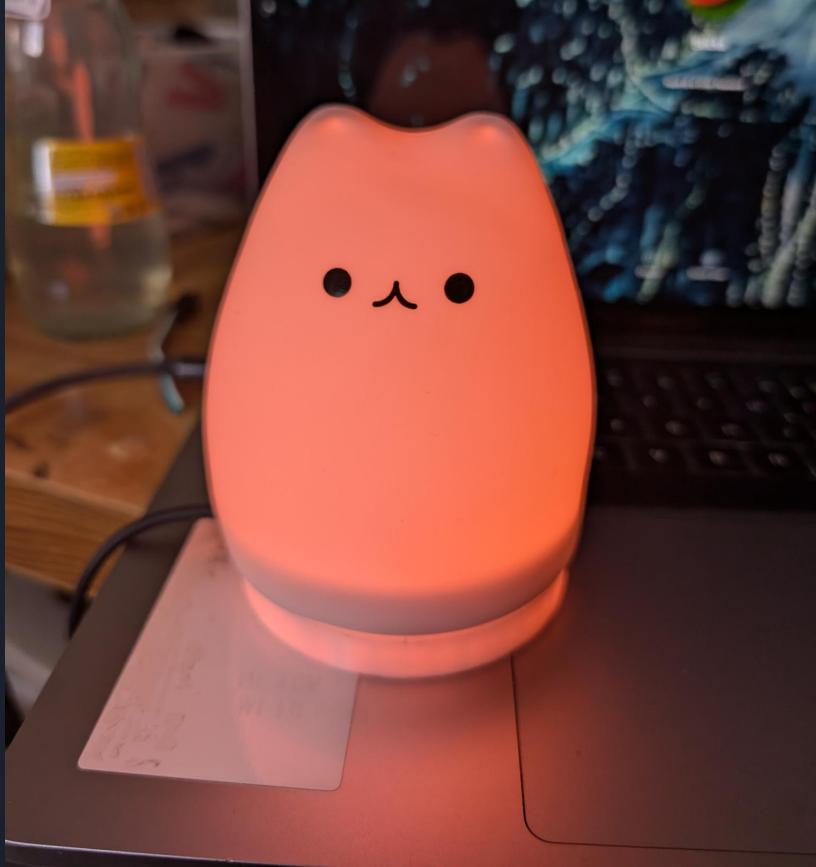
Segments: Segment 0 (selected), + Add segment, Transition: 0.7 s

Presets: Search bar, message: "You have no presets yet!", + Preset, + Playlist

Color palette: Default, * Color 1, * Color Gradient, * Colors 1&2, Aurora

Background: A pixelated illustration of a winter scene with a reindeer-drawn sleigh, houses, and trees.

Attach the Purrsheen cover



Thanks for attending!

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