

Over the week of 9/28 to 10/2, I have mainly been focused on schoolwork and college applications. As such, this week's recap might be a little shorter than usual.

Most of the work that I have had the opportunity to do has centered around the "smart display" that I've been working on for a while now. It's likely going to be my next youtube video if I don't get around to laser cutting in the next week. I've got the initial script done for it, but as I'm still new to this I plan to run it through a couple of rounds of editing before recording the footage for it. It was a pretty complicated process to finally set it up the way I wanted, but I think I can finally be done with the project.

In terms of the actual changes I made, I installed InfluxDB and Grafana on a raspberry pi, reinstalled HomeAssistant and MagicMirror, and moved the raspberry pi from its unsafe "zip tie" case to a proper aluminum heatsink enclosure. In order to provide data to InfluxDB, I also had to install its companion app, Telegraf, onto my Dell server and my file server. In the end, I've got access to a ton of data points and a ton of flexibility in how I display it. For now, I'm keeping my graphics fairly standard, but as I slowly grow and refine my homelab I should be able to add to it. This is a project I've had in a semi-complete state for a while, but haven't gotten around to finishing until now. Next comes the real challenge: making a cohesive video out of it.

For the RGB panels, I'm currently researching the best way to etch the pattern into acrylic. I'm debating whether to do it in cad or as a photo raster in something like AutoCAD. I'm most likely going to create an outline, import it into AutoCAD, and draw on the pattern from there. I also need to find a better source for acrylic, as the one I planned on using just doesn't seem practical with its shipping prices.

That's about it for this week, but in the coming weeks I plan to begin the creation of my next video, etch a test piece of acrylic, and finally update my website with a full "project progress" section and dynamic youtube updater.

Photos of current progress:

PFLUGERVILLE

21:27

Friday, October 2nd

Good (13)
Austin Webberville Rd, Austin, Texas

4 SSE 42° 07:24
69° 79°

INDOOR HUMIDITY:
40.0%

WEATHER FORECAST PFLUGERVILLE, US

Sat	☀	83.5°	61.0°
Sun	☀	87.5°	63.5°
Mon	☀	82.5°	61.5°
Tue	☀	87.4°	64.0°
Wed	☀	79.5°	71.8°

HOME ASSISTANT

Ceiling fan on
 Closet off
 Lyric-7D4DC3175 | 75 | cooling
 Pixel 3 Battery Level | 100%
 Server | 118.12 | 98.65
 Printer | 113.02 | 14.08



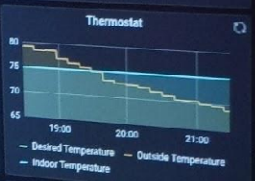
- moonlight love
- charlie toB human
- moonlight love / smooth sailin
- 3:02 / 3:14

PC
 Printer State: Operational
 File: N/A
 Time Elapsed: N/A | Time Remaining: N/A | Percent Complete: N/A
 Temps: Nozzle: 24.0°C T: (N/A) | Bed: 38°C T: (N/A)

Athena Linux Mint Server

Athena Memory Usage: 74%
 Athena CPU Usage: 3.2%
 Athena Disk Usage: 22%
 Ambient Temperature: 24°C
 CPU Temperature: 32°C
 Stopped: 0
 Running: 12
 Total Containers: 12

Smart Home



Windows File Server

Memory Usage: 3.1 GiB
 CPU Usage: 0.31%
 Drive Usage: 84% (SSD), 32% (libretime), 83% (OKDrive)

Athena Wattage: 147 W
 Printer Wattage: 14 W
 Windows Wattage: 99 W
 Pixel Battery: 100%

Zind's Super Server MC



Server Response Time
 LAN: 1.5 ms
 WAN: 103 ms

(Monitor on wall, with grafana up)



(Raspberry pi, Sdr, Ham It up, DHT 11 Sensor)

PFLUGERVILLE

Good (13)

Austin Webberville Rd, Austin, Texas

PFLUGERVILLE





4 SSE 42° - 07:24

69°

21:29

Friday, October 2nd



-  moonlight love
-  charlie to human
-  moonlight love / smooth sailin
-  3:02 / 3:14

Printer State: ✔ Operational
File: N/A

Time Elapsed: N/A | Time Remaining: N/A | Percent Complete: N/A






Temps : Nozzle: 24.9°C T: (N/A) | Bed: 25.6°C T: (N/A)

PC







INDOOR HUMIDITY:

Loading ...

WEATHER FORECAST PFLUGERVILLE, US

Sat		83.5°	61.0°
Sun		87.5°	63.5°
Mon		82.5°	61.5°
Tue		87.4°	64.0°
Wed		79.5°	71.8°

HOME ASSISTANT

-  Ceiling fan on
-  Closet off
-  Lyric-7D4DC3 | 75 | 75 | cooling
-  Pixel 3 Battery Level 100%
-  Server | 120.05 | 100.54
-  Printer | 119.08 | 14.08



(Screenshot of Magic Mirror) (Grafana only shows locally)