🎯 1. Daily Micro-Labs (~30 min each)

Design 1 self-contained practical per day:

Day	Task	Skill
✅ Day 1	Float→int8 scaling (done today)	Quantization, typecasting
🔜 Day 2	Plot IQ waveform (cosine/sine, phase offset)	Signal structure
🔜 Day 3	Add noise + filter it	Real-world signal cleaning
🔜 Day 4	Design metadata structure (manually)	Format design
🔜 Day 5	Read + parse IQ binary file	Binary I/O, validation
🔜 Day 6	Signature + checksum	Integrity + security layer
🔜 Day 7	Save JSON metadata with binary	Containerization

All these are directly linked to your **IQ file format standard project**.

🔷 2. Understand Key Topics in Depth (SDR/DSP)

Spend 15–20 min/day mastering **1 small core concept**, like:

- Sampling, Nyquist, aliasing (visual demos)
- Phase shift and how Q = 90° offset from I
- Filtering (FIR/IIR in Python)
- FFT for IQ visualization
- Windowing and spectral leakage
- IQ imbalance and correction

🔹 Use books like **Think DSP**, **PySDR**, or Lyons's **Understanding DSP**
🔹 Practice each with Python plots — not just theory.

💻 3. Code, Git, Document

Build your GitHub repo:

- Push every micro-lab
- Document each clearly (why, code, output, result)
- Use Jupyter or Markdown

✅ This builds **a portfolio of working skills** — critical if you want to **publish, present, or monetize** later.

📽️ 4. Watch Only One Short Video to Reinforce

E.g., look up “IQ data explained” (no more than 10–15 mins)

- Watch, pause, and *validate what you already know* by coding or noting.

This strengthens confidence and clarity, especially visually.

🔁 5. Repeat-Cycle Learning (Spiral Learning)

Revisit the same signal (like a 1 kHz cosine):

- First float
- Then int8
- Then clipped
- Then filtered
- Then visualized via FFT
- Then resampled or corrupted and corrected

👉 The **signal is the same**, but you **do more each cycle** — this makes your understanding *deep and applied*, not scattered.

🔚 Bottom Line:

You're not far from crossing the zone where:

> “It feels like I’m learning” → **“I know how to build”**

If you follow this mix of:

- Daily hands-on (lab notebook style)
- One-topic-a-day theory drills
- Mini Git-based portfolio
- Daily check-ins