PHASE 0: THE LAUNCH (Weeks 1–4)

Goal: Secure the Interview at Google Quantum AI.

- **Step 1: The Digital Footprint (Day 1-3)**
    - **GitHub:** Create the `m107B-Quantum-Interconnect` repo. Upload your clean Python code and the simulation graphs. Write a `README.md` that highlights the "6065x Signal Advantage".
    - **LinkedIn:** Post the "IQ Cloud" graph (Figure 4) with the caption about breaking the binary bottleneck. Tag Google Quantum AI.
- **Step 2: The Formal Application (Day 4)**
    - Apply to "Research Intern, PhD" or "Quantum Interconnects" roles on Google Careers.
    - Upload the **Executive Summary** (Cover Letter) and the **FMEA Risk Table** as "Additional Documents."
- **Step 3: The Direct Strike (Day 5)**
    - Send the "Data Center First" email to Dr. Julian Kelly and Dr. Erik Lucero. Attach the Executive Summary.

PHASE 1: THE DEFENSE (The Interview Stage)

Goal: Survive the Technical Review and get hired.

- **The "Why Fluxonium?" Question:**
    - **Your Answer:** "Transmons are great for compute, but they are too harmonic for high-density networking. Fluxonium provides the anharmonicity needed to steer 6 states without leakage."
- **The "Risk" Question:**
    - **Your Answer:** "I know drift is a risk (RPN 72). That's why the architecture mandates operating at the **Half-Flux Sweet Spot** and using **100μs Active Feedback**, which drives the effective risk down to 15."
- **The "Compatibility" Question:**
    - **Your Answer:** "m107B is the 'Network Card,' not the CPU. We capacitively couple to your existing Transmons. We don't replace them; we connect them."

PHASE 2: THE PROTOTYPE (Months 1–6 at Google)

Goal: Build the "Loopback" Demonstrator.

- **Month 1: Calibration:**

    - Port your Python GRAPE pulses to Google’s internal FPGA stack.
    - Fabricate the first test batch of 6-state Fluxonium chips using Google's Santa Barbara cleanroom.
- **Month 3: The "Cryo-Link" Test:**
    - Install a Superconducting Niobium Waveguide between two mix-plates in the same fridge.
    - **Milestone:** Demonstrate **20ns gate transmission** with <0.1% loss (validating the "Zero Resistance" theory).
- **Month 6: The "Speed" Test:**
    - Integrate the **TWPA** (Parametric Amplifier).
    - **Milestone:** Prove **32.1x readout speedup** in real hardware, matching your simulation.

PHASE 3: THE CLUSTER (Months 7–18)

Goal: Connect Two Fridges (The "Data Center" Pivot).

- **The Challenge:** Connecting two separate dilution refrigerators with a cryo-pipe.
- **The Fix:** Deploy the **Cryo-Link** (Phase 1 Strategy).
    - Connect Fridge A (Sycamore Processor) to Fridge B (Sycamore Processor) via m107B.
    - **Milestone:** Transmit a "Neural Weight" (Value 0–5) from Fridge A to B with **99% Fidelity**.
- **The Result:** You have just created a **Modular Supercomputer**. This is the product Google wants to sell.

PHASE 4: THE GRID (Year 2+)

Goal: Long-Distance City Networking.

- **The Shift:** Move from Cryo-Cables to Optical Fiber.
- **The Tech:** Integrate **Erbium-Doped Memory Buffers** to solve the Transduction efficiency problem (Risk 63).
- **The Deployment:** Connect the Google Lab to an external node (e.g., UC Santa Barbara) via TFLN modulators.