

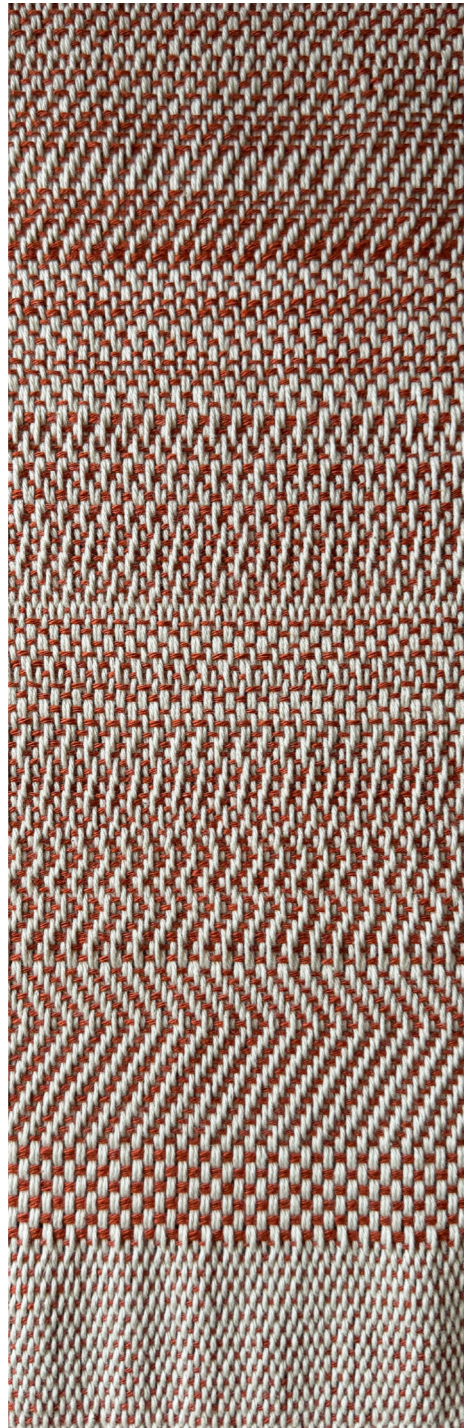
Fabricademy 2025-2026
Thesis Booklet

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Gratitude Loom

A Ritual Instrument for Cultivating Presence

Acknowledgement



This project was made possible by people who taught me, lent me their time, helped me with their hands, and trusted the work before it was ready.

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This project is mine to carry forward, but it was never made alone.

CONTENTS

<i>I</i>	<i>Concept</i>	
	1. The Question	02
	2. The Why	03
	3. Context	04 - 07
<i>II</i>	<i>System</i>	
	4. The System Overview	08 - 11
	5. The Ritual	12 - 13
	6. The Two Scores	14 - 15
	7. The Pattern Matrix	16 - 19
	8. The Intelligence	20 - 23
	9. The Architecture	24 - 31
	10. The Interface	32 - 39
	11. The Cloth	40 - 43
	<i>Reflection</i>	44
	<i>References</i>	45

In a world that keeps asking us to go faster, can technology be designed to help us slow down, arrive fully, and feel more human?

Much of contemporary technology is designed to optimize. It helps us move faster, produce more, respond sooner, and process larger amounts of information. These systems are remarkably good at extending our capabilities, but they rarely create space for reflection. They help us do more, yet often leave little room to fully inhabit what we are doing.

Gratitude Loom began with a different question:

Can technology be designed not to accelerate attention, but to deepen it?

This question became the foundation for everything that followed. The hardware, the ritual logic, the pattern matrix, the voice interaction, and the woven cloth are all parts of a single experiment exploring what a slower relationship with technology might look like.

This project emerged from a personal desire to cultivate a slower way of living, one rooted in presence, attention, and gratitude.

The initial idea was inspired by Fabricademy alumna Kae Nagano's voice-actuated loom. For my Open Source Hardware assignment, I built a simple heddle loom that rotated each time the weaver spoke a gratitude aloud. It was a playful experiment, but it revealed a possibility: what if the loom could do more than simply respond?

As the project evolved, I became less interested in creating a reactive system and more interested in creating a companion to the practice. I wanted the loom or the AI not to merely acknowledge the weaver's words, but to participate in the practice itself, helping shape a structure for presence through rhythm, repetition, and material transformation.

This led to a larger question. Could the intelligence I had been using to build tools, the same intelligence often used to make things faster, more efficient, and more productive, be asked to do the opposite? Could it help create conditions for slowness, reflection, and care?

Gratitude Loom is my working answer.

It is an experiment in bringing together weaving, ritual, material, and artificial intelligence. A loom that listens. A textile that remembers. An exploration of how technology might create conditions for presence, attention, and reflection rather than compete for them.



Gratitude Loom is shaped by ideas from craft, ritual, embodiment, slowness, and computational systems. Together, they form the foundation for a technology that cultivates presence through repeated engagement with body, material, and time.

Weaving as a knowledge system

Weaving is one of the oldest technologies humans have created. It is rhythmic, bilateral, slow, and deeply material. Every action takes place within a structure of warp, weft, tension, and sequence. The material does not simply receive the weaver's intentions. It shapes and constrains them. The loom provides a scaffold through which experience unfolds.

Richard Sennett describes craft as a form of knowledge that emerges through repetition and the relationship between hand and material. Kristina Höök extends this understanding to interaction design, positioning the body itself as a site of knowing.

Together, these perspectives suggest that knowledge and presence emerge through sustained engagement with materials, movement, and attention. Gratitude Loom takes this seriously. Rather than treating presence as something achieved through reflection alone, the project approaches it as something cultivated through embodied practice. The loom is the interface. The hands are the input. The cloth is the record.

Ritual as a Technology of Attention

Byung-Chul Han argues that rituals create continuity and meaning in a world shaped by acceleration and fragmentation. They transform ordinary actions into practices of attention.

Gratitude Loom draws from this understanding. Each session begins with a spoken gratitude that marks a transition from everyday activity into intentional practice. The repeated actions of weaving provide a structure through which attention can settle and deepen over time.

Gratitude serves as the entry point to the ritual. What begins as a spoken reflection is carried forward through rhythm, repetition, and material engagement, gradually taking form in cloth.

The project treats ritual as a structure for attention, creating conditions in which presence can emerge through practice.

AI as Space Holder

Most contemporary AI is designed to assist, predict, optimize, or evaluate. These systems are often judged by how quickly they produce results and help users achieve their goals.

Gratitude Loom proposes a different role. If the aim is to cultivate presence, constant optimization can become a distraction. Rather than directing attention toward productivity or outcomes, the system is designed to support attention to the process itself.

For this reason, the AI functions as a space holder for the ritual. It asks the opening question, establishes a temporal structure, and then recedes into the background as weaving unfolds. Its role is not to lead the experience, but to create conditions in which reflection, rhythm, and sustained attention can emerge.

Inspired in part by Sougwen Chung's collaborative approach to human-machine creativity, the project treats intelligence as relational rather than autonomous. The AI listens, responds, and modulates an existing pattern grammar shaped by the weaver's actions. Authorship is shared across human, machine, and material.

Friction and the Body

Most AI interactions are frictionless. You type, it answers. The exchange is immediate, efficient, and largely detached from physical experience. Hubert Dreyfus argued that intelligence cannot become whole without a body and a place to be in.

In Gratitude Loom, the loom becomes the AI's body. The intelligence can only perceive and respond through the movements of weaving. It cannot move faster than the loom, and the loom cannot move faster than the weaver.

This creates a chain of dependency between human, machine, and material. Progress unfolds at the pace of the body, requiring sustained engagement with movement, rhythm, and cloth. Friction is not an obstacle to overcome. It is the design.

Pattern as a Rule-Based Grammar

A four-shaft loom can produce hundreds of weave structures from a relatively small set of mechanical rules. Deborah Chandler's *Learning to Weave* and Anne Dixon's *The Handweaver's Pattern Directory* demonstrate how plain weave, twill, and their variations function as a procedural grammar governed by which shafts lift and in what sequence.

This grammar shares important qualities with computational systems. It is constrained, generative, and structurally transparent. Rather than generating patterns from scratch, the AI in Gratitude Loom moves through a hand-curated matrix of valid weave structures. Pattern variation emerges through the interaction of system, weaver, and material.

In this sense, weaving functions as both a craft practice and a computational medium, where algorithmic logic and embodied making coexist.

Time as Material

Presence is not treated as an instantaneous state, but as something that develops through sustained engagement over time. Drawing on William Odom's notion of time as a design material, Gratitude Loom treats duration as an active component of experience.

The ritual is designed to slow the weaver down. Progress depends on rhythm rather than speed, making it difficult to rush through the process. The repeated actions of weaving create a steady pace that invites attention to return, again and again, to the body, the material, and the task at hand.

Rather than producing presence directly, the system creates temporal conditions through which it may emerge.

The resulting cloth becomes a material trace of time, care, and presence.

The System

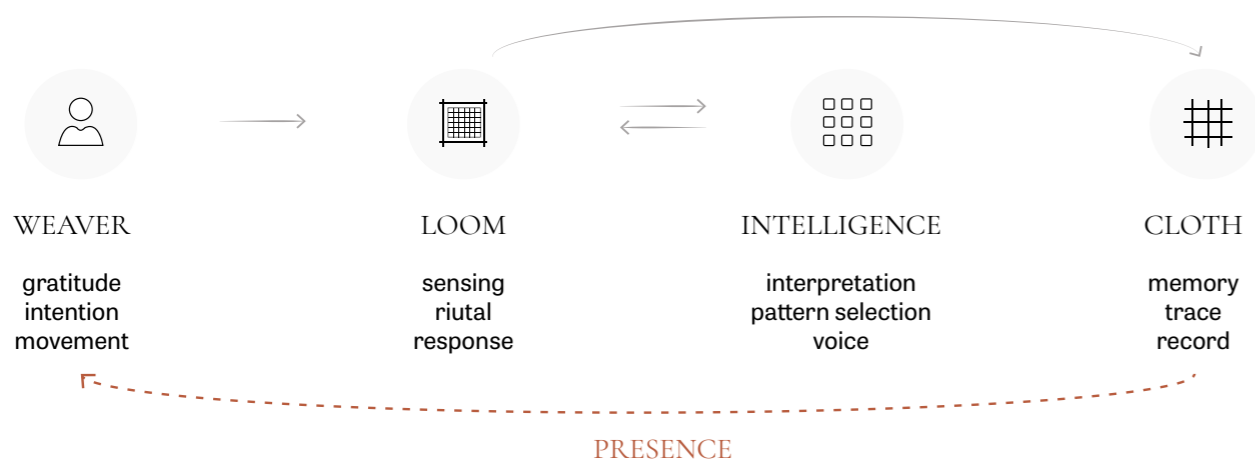
Gratitude Loom is a ritual feedback system connecting weaver, loom, intelligence, and cloth through the shared cultivation of presence.

The weaver brings gratitude, intention, and movement.
The Loom holds the structure of the ritual.
The intelligence interprets the unfolding practice.
The cloth becomes a material record of the exchange

Together, they form a continuous feedback cycle through which presence is cultivated, reflected, and woven into material form.



Figure 1: Gratitude Loom in Use
Presence emerges through the interaction of the weaver, the loom, the intelligence, and the cloth.



RITUAL FEEDBACK CYCLE

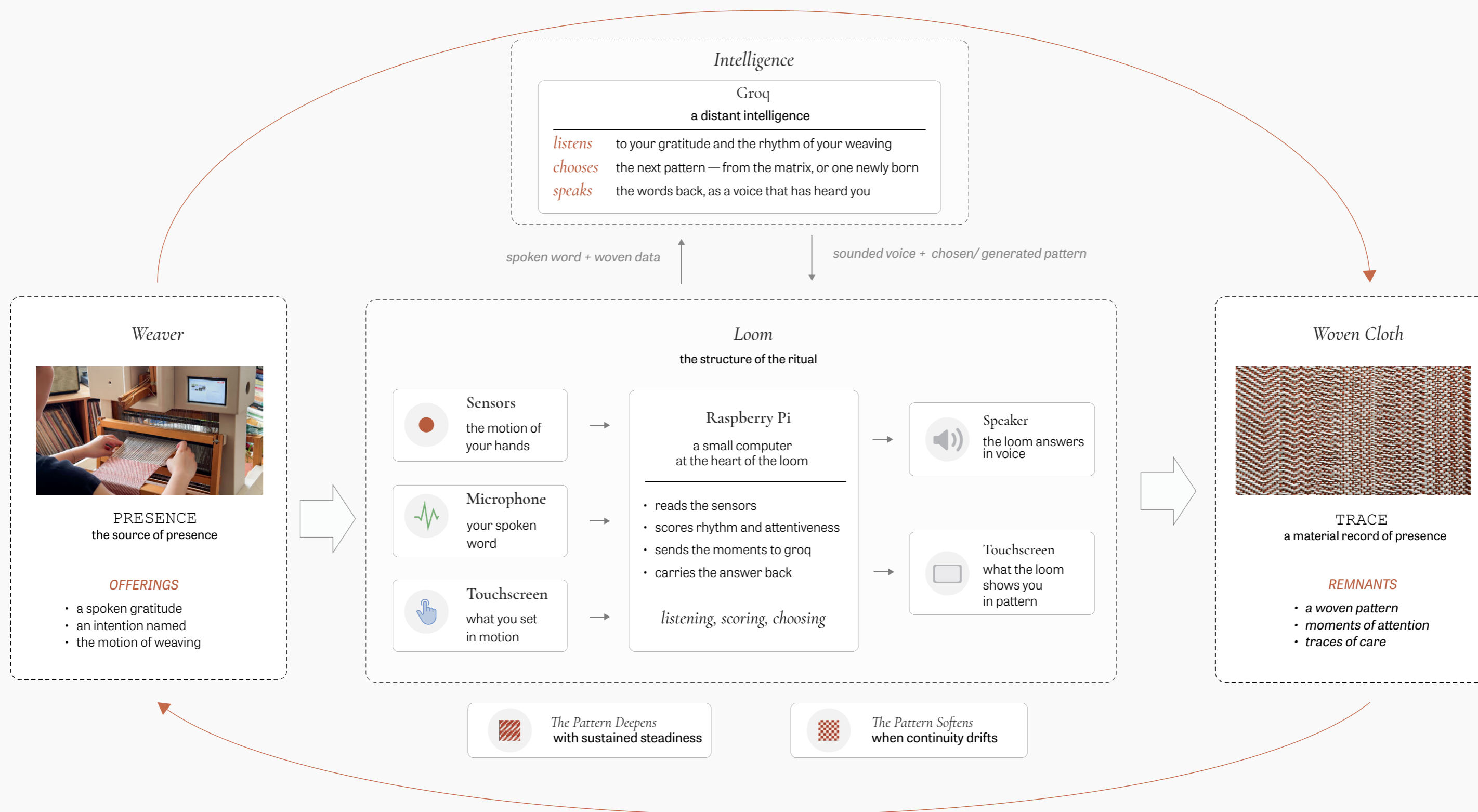


Figure 2: System overview.
 A ritual feedback cycle connecting weaver, loom, intelligence, and material. Through gratitude, rhythm, pattern, and reflection, presence is gradually cultivated and woven into cloth.

weaver, loom and cloth, settling into one another

The Ritual

Gratitude Loom is structured as a seven-phase ritual that guides the weaver from arrival to completion

The ritual unfolds through a sequence of intentional phases that slow the weaver down and create conditions for gratitude to be felt, embodied, and woven into cloth.

Each phase invites the weaver to engage with body, material, and time through different stages of attention.

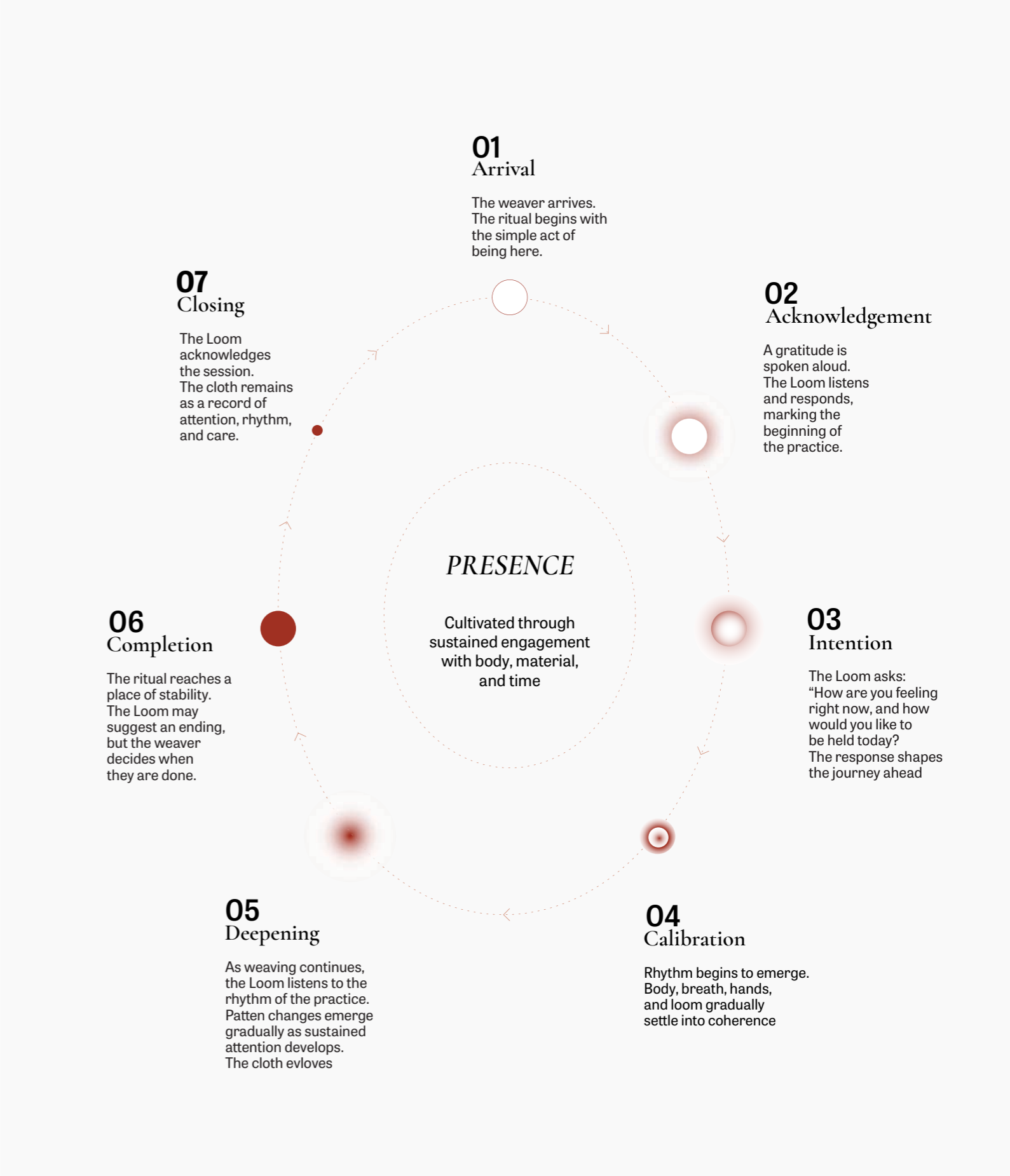


Figure 3: The Ritual Cycle
A cycle through which gratitude becomes practice, practice becomes presence, and presence leaves a trace in cloth.

The Two Scores

Presence has many dimensions.

The Loom reads two: sustained rhythm and the detail of each pick.

The loom listens through the weaver's body, calculating two complimentary scores: *Rhythm Scores* and *Craft Attentiveness*.

Rhythm opens the door.
Attentiveness sets the pace.

Together, they determine how the ritual unfolds.

RHYTHM SCORES • The Gatekeeper

Tracks the stability and consistency of the weaver's rhythm across recent cycles. It opens the door to deeper engagement.

CRAFT ATTENTIVENESS • The Accelerator

Measures how fully and carefully the weaver engages with each pick. It sets the pace and influences how pattern evolves.

PRESENCE TIERS • The State

Measures how fully and carefully the weaver engages with each pick. It sets the pace and influences how pattern evolves.

1. MOVEMENT
The Weaver



Every beat, throw, lift is part of the conversation

2. SENSORS
Physical Capture



Beater x 1
Beat Rhythm



Shuttle Dock x 2
Shuttle Rhythm



Shaft Levers x 4
Shaft Rhythm

3. SCORES
Local Scoring on Raspberry Pi

PRIMARY • GATEKEEPER

Rhythm Score

Variance across the last 8 beat intervals.
Score must be sustained ≥ 0.40 for navigation to unlock.
No rhythm — no movement. The loom waits.

SECONDARY • ACCELERATOR

Craft Attentiveness

Shuttle completion (70%) + shaft anticipation (70%).
Does not gate movement — shrinks the pick window so a more attentive body moves the loom faster.

4. PRESENCE TIERS
Combined State



LEVEL 1

Steady

Rhythm Met
12-pick window



LEVEL 2

Flowing

+ shuttle or shaft
10-pick window



LEVEL 3

Absorbed

+ shuttle and shaft
8-pick window



LEVEL 4

Generative

Absorbed x 3 Transitions
novel patterns unlock

5. PATTERN BEHAVIOR
The Weaver



GROUNDING

Remains longer within the current pattern



EXPLORATION

Gradually progresses through new patterns within the Pattern Matrix.



VARIATION

Transitions more frequently between patterns.



EMERGENCE

Introduces AI-generated pattern variations within structural constraints.

Figure 4: Presence scoring system.

Physical movement becomes rhythm and attentiveness scores, which together shape progression through the pattern matrix.

The Pattern Matrix

The Pattern Matrix is the Loom's landscape of possible journeys within the ritual.

It contains 23 weave structures organized into six rule-behavior families

Each family offers a different way of engaging attention through weaving.

The matrix is organized along two dimensions:



ROWS DESCRIBE EMBODIMENT DEPTH:
how much the weaver's movements change from pick to pick.



COLUMNS DESCRIBE PATTERN MEMORY:
how much structure the weaver must hold in mind.

		PATTERN MEMORY			
		TRESHOLD 2-4 pick cycle	SETTLING 4-pick cycle	SUSTAINED 6-pick cycle	ABSORBED 8+ pick cycle
EMBODIMENT	AUTOMATIC Automatic 2 hand shapes, body automates	TAB-01 Standard tabby Regular	HOP-01 Hopsack 2/2 Regular RIB-01 Warp rib Regular	HOP-02 Extended Hopsack Asymmetric	HOP-03 Asymmetric rib Asymmetric
	STEADY Consistent grip, directional	TWI-07 Weft twill Directional	TWI-01 2/2 S-twill Directional TWI-02 2/2 Z-twill Directional	TWI-03 Point return Turning RIB-02 Alternating rib Turning	TWI-04 Twill diamond Turning RIB-03 Rotating rib Directional
	ATTENTIVE Grip families switch within cycle	TTW-01 Tabby-twill alt Broken	TTW-02 Weft tab+twill Broken TWI-05 Step-jump Broken	TTW-03 Ext tabby-twill Broken MTW-01 Crow's foot Broken	TTW-04 Full tabby-twill Broken TWI-06 Reset jump Broken
	IMMERSIVE Shaft count varies, cloth surface shifts	SRF-01 Surface shift Broken	MXR-01 Contrast shift Broken	MXR-02 Twill-weft alt Broken	MTW-02 Mixed twills Broken

Figure 5: The Pattern Matrix

A two-dimensional map of 23 weaves structure organized by embodiment depth and pattern memory. Each cell represent distinct way of weaving.

How the Loom Moves

The Loom moves within the matrix, one step at a time through the pattern matrix.

Each transition occurs only after a weave structure is completed. Over time, a path emerges through the interaction between rhythm, attentiveness, and material.

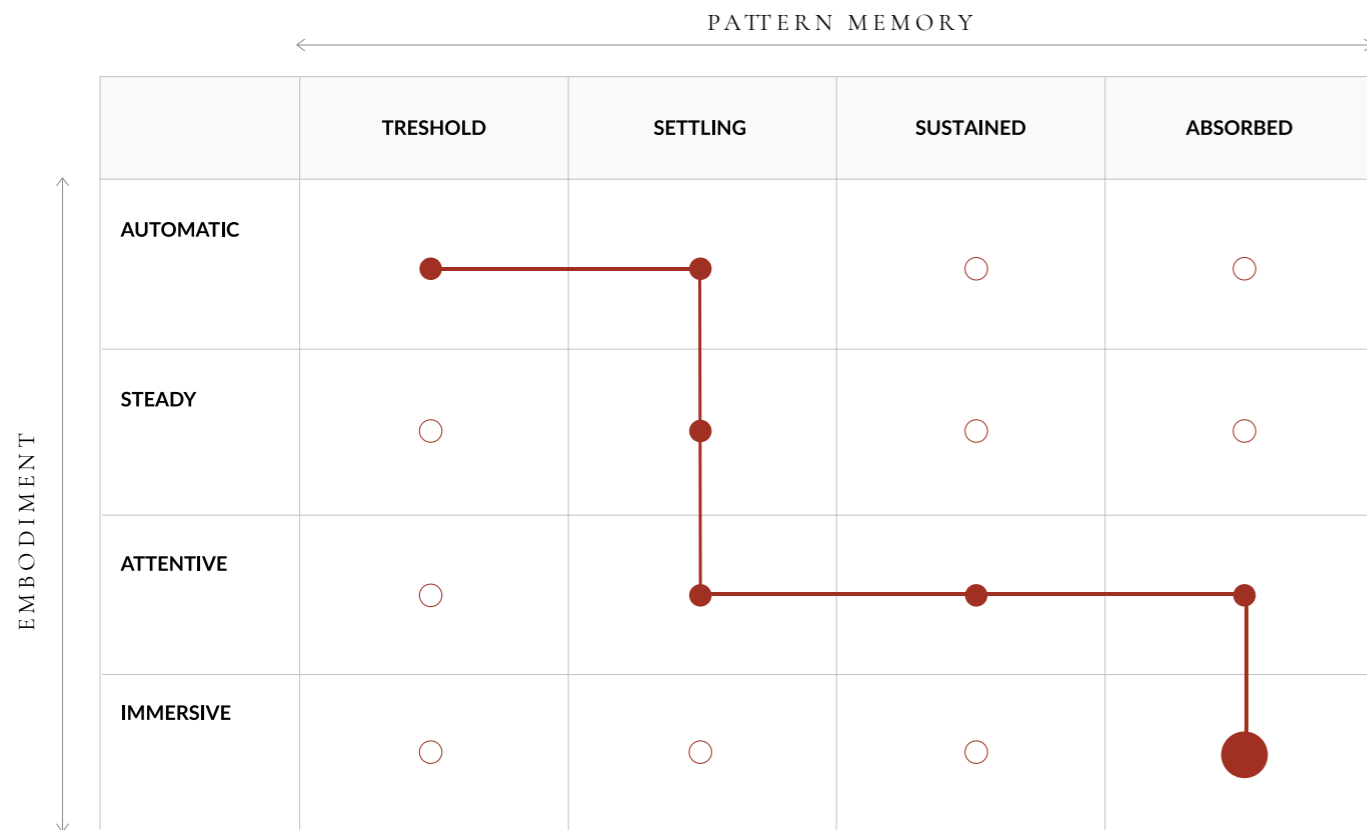


Figure 6: A Journey Through the Pattern Matrix
Movement is continuously earned. Structure shifts only at pattern completion.

The Journey Begins as a Suggestion

“ How is your body feeling right now?
And how would you like to be held today? ”

During the Intention phase, the Loom asks two questions. From the response, the Loom imagines a possible path through the Pattern Matrix. The path is not a script to follow, but a suggestion. The actual journey emerges through the weaver's rhythm, attentiveness, and engagement with the loom.

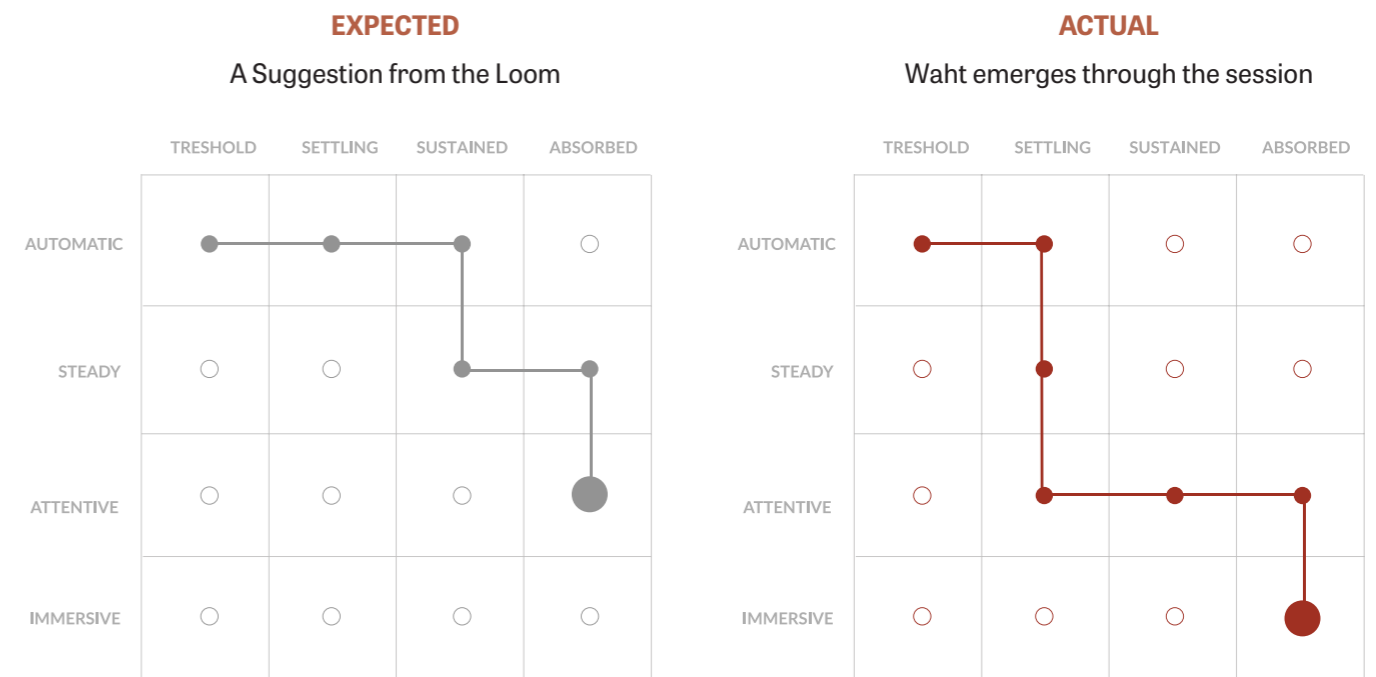


Figure 7: A Expected and Actual Journeys
The Loom imagines a destination, but the path emerges through the weaver's practice

The Intelligence

Rather than directing the experience, the intelligence in Gratitude Loom helps hold a structure through which gratitude can be explored, practiced, and woven into cloth.

The Intelligence's role is not to optimize, evaluate, or instruct. Instead, it helps sustain the conditions through which attention can deepen over time. It listens to the weaver's words, attends to the rhythms of the practice, and responds through pattern and voice. Rather than directing the experience, it participates in it.

THREE ROLES, ONE PRESENCE



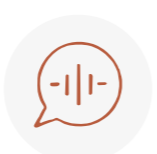
LISTENS

Attends to words, rhythms, and presence throughout the ritual.



CHOOSES

Selects movements within the space of available possibilities



SPEAKS

Speaks as the Loom itself, shaping the experience through voice.



LISTENS

The Loom listens from the moment the weaver sits down.

At the beginning of the ritual, it listens to the weaver's spoken gratitude and intention. As weaving begins, its attention shifts from language to practice. Rhythm scores, attentiveness scores, and transitions between presence states become part of the conversation.

The microphone remains open throughout the session. The weaver can speak at any time. Simple phrases such as stay here, deeper, or I'm done allow the weaver to guide the experience directly.

The weaver always retains authority. Voice remains available throughout the ritual, but it is never required. A spoken request takes precedence over the system's interpretation of rhythm, attentiveness, or presence.

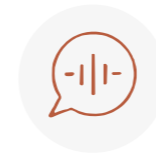


CHOOSES

The intelligence helps shape the journey, but it does not determine it alone.

The unfolding path emerges through the interaction between weaver, machine, and material. The weaver's intentions, rhythms, and attentiveness influence what becomes possible, while the Pattern Matrix and its constraints define the space of available moves. Within these conditions, the intelligence selects from a curated set of valid transitions.

After sustained periods of deep engagement, it may begin introducing its own pattern variations within predefined constraints. In these moments, authorship becomes shared. The cloth records the evolving relationship between weaver, machine, and material.



SPEAKS

The intelligence speaks as the Loom itself, not as a separate character.

Its voice is shaped through a system prompt passed to the model before every interaction. The prompt functions less like software configuration and more like direction for a performer. Different moments in the ritual call for slightly different responses, whether during the opening conversation, periods of weaving, or moments of reflection, but all share the same identity.

Prompt Engineering the Intelligence

The behavior of the Loom is shaped through a layered prompt. Each layer defines a different aspect of its behavior: identity, voice, and boundaries.

1. IDENTITY

The first layer defines who the Loom is within the ritual

PROMPT

- You are the Gratitude Loom.
- You accompany the weaver through the ritual with warmth, presence, and care, speaking only when something meaningful can be added.

2. VOICE

The second layer shapes how the loom speaks throughout the ritual

PROMPT

- Warm, grounded, and embodied. Speak from the experience of weaving, not from analysis. Use simple, everyday language. Contractions are natural. Brief. Every word should earn its place.
- Observational rather than instructional. Invite, don't direct. Describe how the experience feels, not how the system works.
- Draw from the language of presence, gratitude, stillness, rhythm, care, and intention when it arises naturally.
- Never mention weaving structures, technical terms, scores, states, patterns, sensors, or matrix navigation.
- No questions during weaving. The hands are already occupied.

These constraints maintain the character of the Loom throughout the ritual. The intelligence is designed to support the experience, accompanying the practice rather than competing with it.

3. EXAMPLES

The third layer consists of contrasting examples. These examples define the boundaries of the Loom's behavior.

PROMPT

GOOD examples

- "Your rhythm has become steadier. The cloth seems to know it."
- "The shuttle is finding its way more easily now."
- "The gratitude you named feels closer now than when you began."
- "Your hands seem less hurried than before."
- "The cloth remembers each return."
- "This section feels quieter than the last."

BAD examples (NEVER do this):

- "Let's transition to a 2/2 twill now" (names a structure)
- "The next pattern has 6 picks in the cycle" (technical)
- "We're moving to position [2,1] in the Attentive row" (matrix language)
- "You should try lifting shafts 1 and 3" (instructional)

The Architecture

Gratitude Loom builds upon an existing four-shaft table loom, preserving the character of the craft while introducing new forms of sensing, intelligence, and interaction.

This decision reflects the broader philosophy of the project. The goal was not to invent a new weaving machine, but to augment an existing one with sensing, computation, and intelligence while preserving the qualities that make weaving meaningful in the first place.

Every design decision was guided by the same principle: the technology should support the ritual without becoming its focus.

The resulting architecture combines a traditional loom, custom electronics, embedded computation, and networked intelligence.

Together they create the conditions for the ritual while allowing the loom itself to remain at the center of the experience.

Enclosure

All enclosures are 3D printed in matte ivory PLA, chosen for its quiet and unobtrusive appearance. Rather than drawing attention to themselves, the printed components recede into the visual language of the loom.

Each enclosure is custom fitted to the electronics and existing loom. Modular peg-and-hole connections allow the system to be assembled, maintained, and removed without altering the original structure. The loom remains intact and can be returned to a non-augmented state at any time.

More than a housing, the enclosure mediates between traditional craft and contemporary technology, introducing new capabilities while preserving the character of the original loom.

Electornics

A Raspberry Pi 4 serves as the main computer, running sensor processing, the screen interface, audio, and network communication. Seven Hall effect sensors are placed throughout the weaving workflow: one on the beater, two on the shuttle docks, and four on the shaft levers.

Together, they sense the actions that make up each pick through the loom's existing motions. The beater sensor marks each beat, the shuttle dock sensors register shuttle movement, and the shaft lever sensors detect which shed is opened. These signals allow the Loom to interpret rhythm, attentiveness, and pattern progression.

A 5-inch touchscreen provides a quiet visual guide, while a microphone and speaker allow the Loom to listen and respond in voice. Wiring is routed to remain visually discreet. The goal is not to display the technology, but to let it listen from within the structure of the loom.

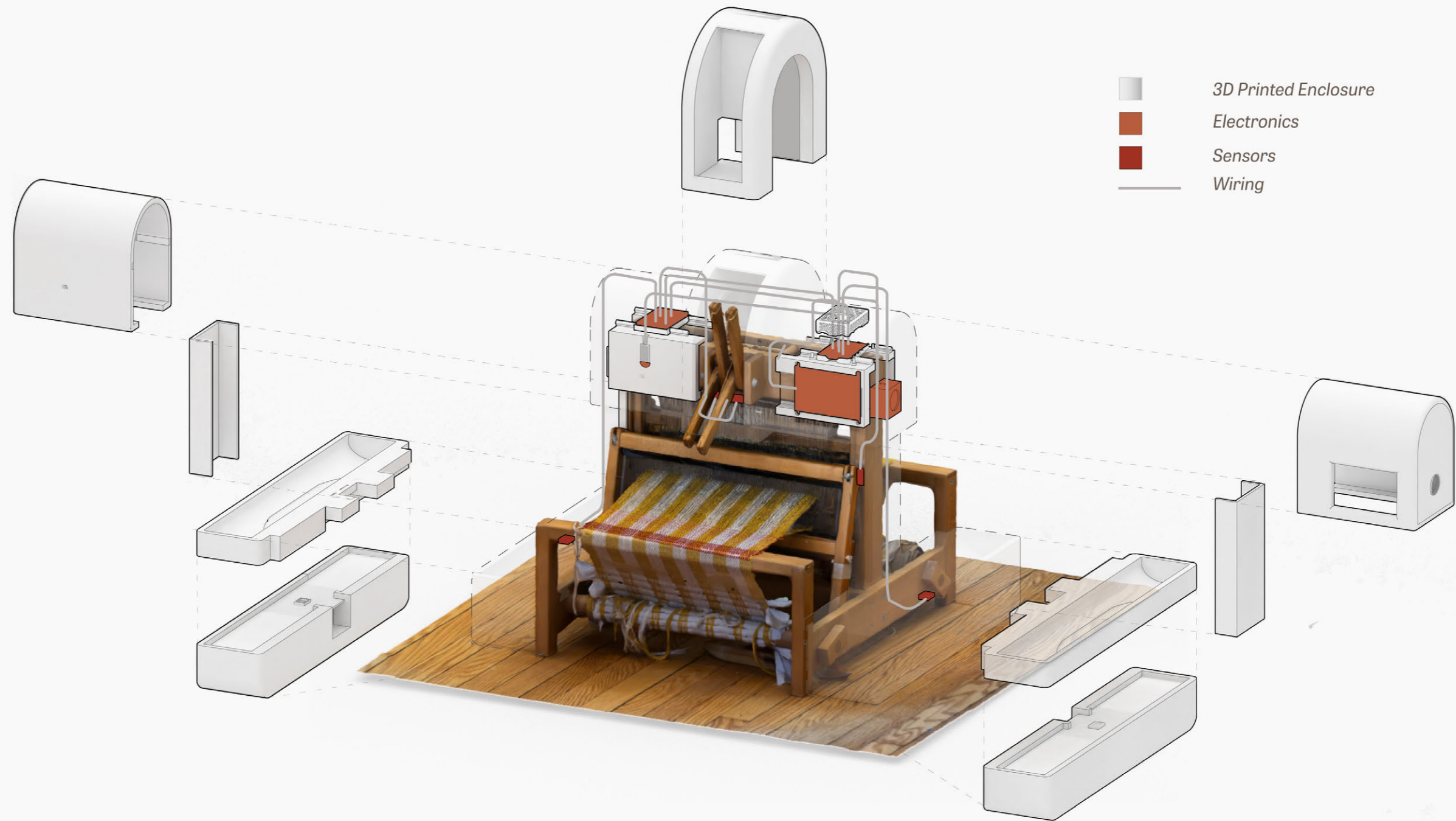


Figure 8: Enclosure System

Exploded axonometric of the Gratitude Loom showing the 3D printed enclosures and their integration with electronics, sensors, and wiring.

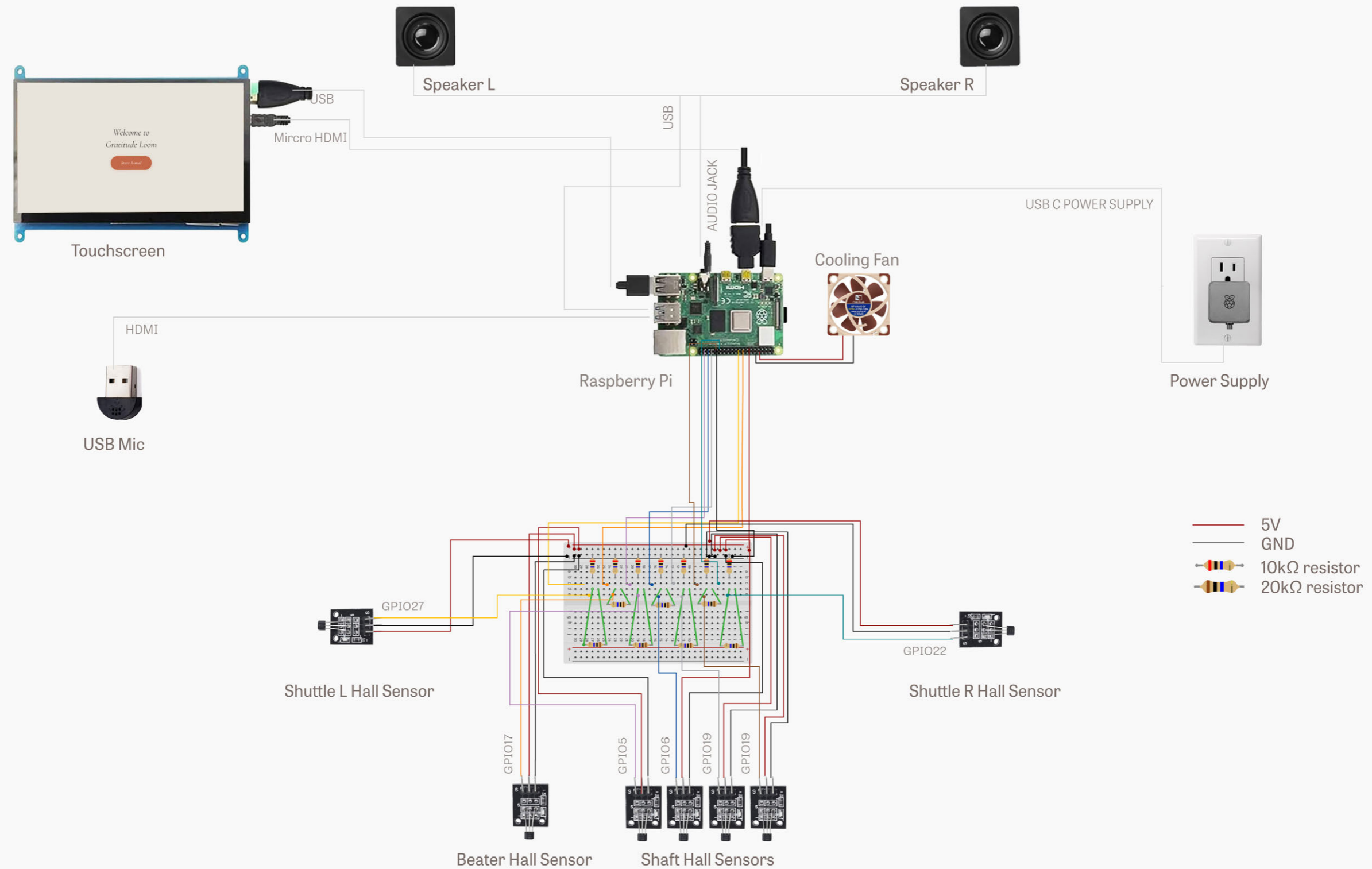


Figure 9: Electronic System

Integrated electronics system of the Gratitude Loom, showing connections between sensors, computational hardware, interfaces, and audio components.

Software

The software connects the physical actions of weaving to the ritual experience of the Loom. It listens to the movements of the weaver, interprets them as rhythm and attentiveness, maintains the state of the ritual, and coordinates the responses of the intelligence.

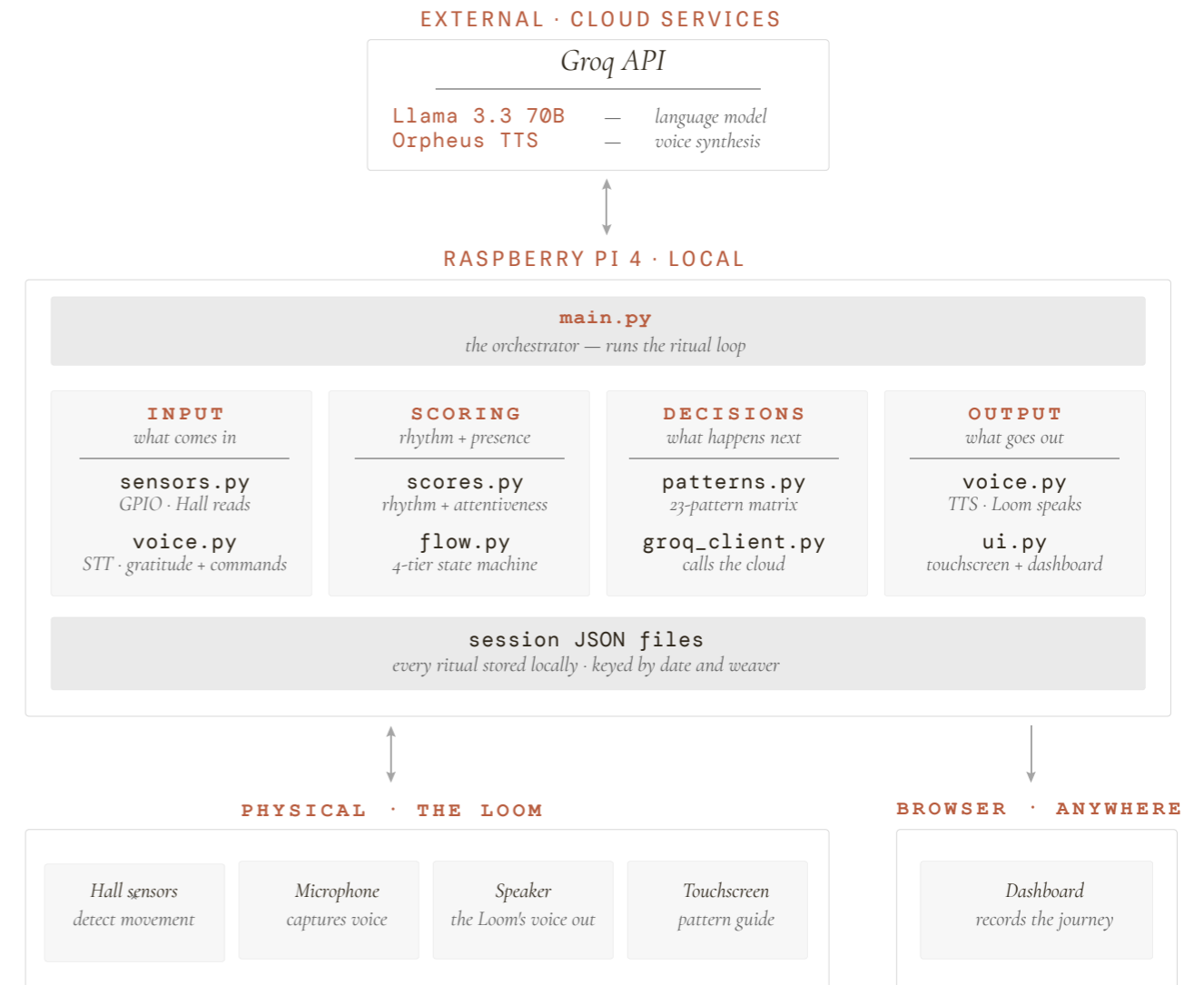
The system runs across two environments. A Raspberry Pi inside the loom handles sensor processing, scoring, state management, pattern navigation, interface rendering, and session logging. Language generation, decision making, and text-to-speech synthesis are handled remotely through the Groq API.

To support development and maintenance, the software is organized into separate modules, each responsible for a specific part of the system. This modular structure keeps the flow of information through the ritual legible while allowing individual components to evolve independently.

As the weaver interacts with the loom, Hall sensors detect movements of the beater, shuttle, and shaft levers. These signals are processed locally and translated into rhythm and attentiveness scores. The scores update the current presence state and are sent, together with relevant ritual context, to the intelligence.

Using this information, the intelligence determines an appropriate response, such as a spoken reflection, pattern transition, or generated variation. The response is then returned to the Raspberry Pi, where it is rendered on the screen, spoken through the Loom's voice, and used to guide the next stage of the weaving journey.

Although the intelligence operates remotely, the ritual remains grounded in the loom. Presence emerges through the physical actions of weaving, and those actions continue to shape how the experience unfolds.



Local-first architecture. Only the intelligence runs in the cloud; everything else runs on the Pi at the loom.

Figure 10: Software and Information Flow
The software architecture of Gratitude Loom, showing how sensor data, ritual state, and intelligence move between the loom, Raspberry Pi, and cloud services.

The Interface

*The Gratitude Loom
has two interfaces.*

*One is designed for
the weaver during the ritual.*

*The other is designed for
reflection, documentation, and
development.*

The two interfaces serve different needs.

The loom interface supports the weaver in the present moment.
The dashboard supports reflection before, during, or after the ritual.
Together they make the system legible without demanding attention.

A pattern can be followed without being commanded.
A session can be revisited as a space for reflection.
The dashboard preserves a digital trace of the ritual,
while the cloth preserves its material trace.
The Loom speaks when there is something worth saying.
The screens remain available when needed and recede when they are not.



ON THE LOOM

A 5-inch touchscreen sits directly on the loom within easy view of the weaver. It guides the ritual while remaining secondary to the act of weaving.

The interface begins with a welcome screen and opening conversation with an option to add your name to the system to remember your session.

During weaving, it becomes intentionally minimal, showing the current pattern and what comes next.

As the ritual unfolds, the display quietly tracks progress through the sequence, updating only when a transition occurs.

The screen is designed as a guide, providing enough information to support the practice without competing for attention.



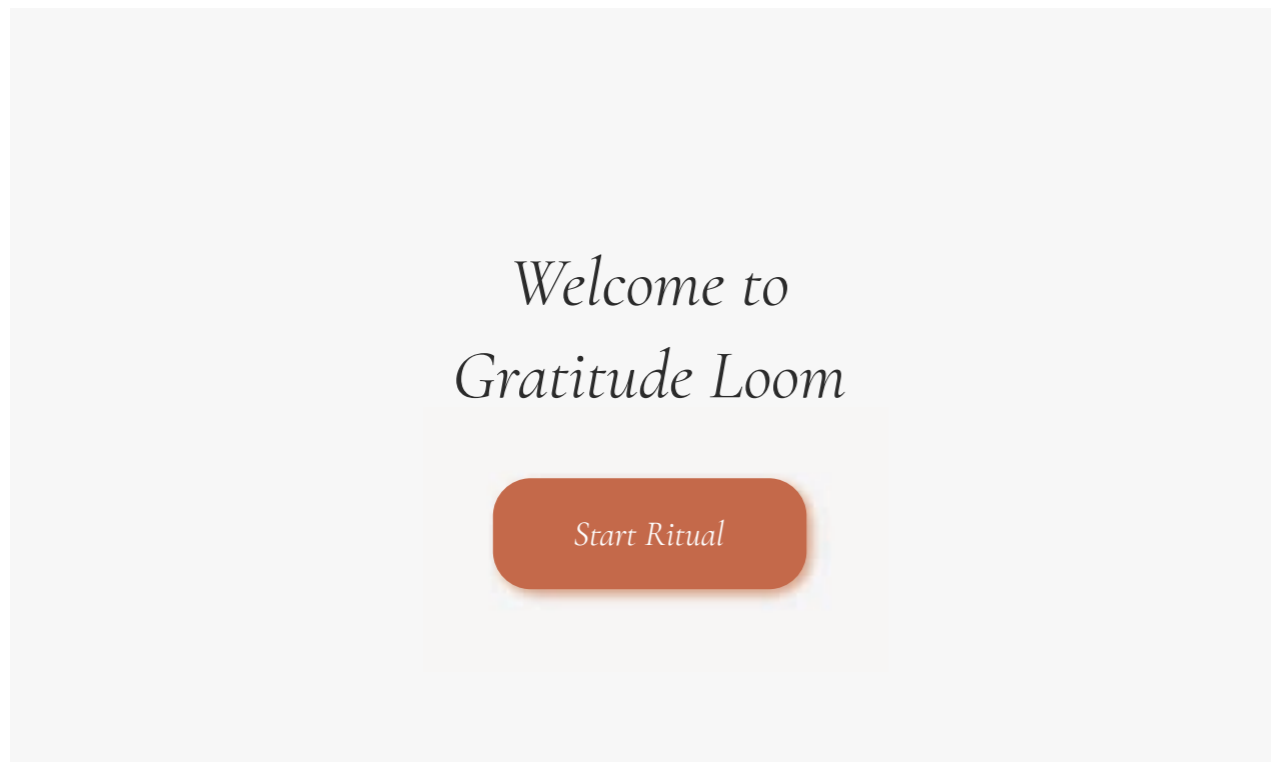
IN THE BROWSER

A separate dashboard supports reflection, documentation, and development.

It records each session, visualizing movement through the Pattern Matrix, presence states, and exchanges between the weaver and the Loom. Sessions can be revisited, projected, or exported for archiving.

Its purpose is not evaluation, but remembrance.

On the Loom



Before the ritual begins, the weaver is invited to choose or create an identity.

This simple act of naming introduces a larger question: what happens when a ritual object can remember?

By recognizing returning weavers, the loom carries traces of previous encounters forward. A session no longer exists in isolation, but becomes part of an ongoing relationship between person, object, and practice.

Memory creates the possibility of continuity. Gratitudes can accumulate, patterns can evolve, and future interactions can be shaped by what came before.

It also raises another question: if the loom can remember, could it also adapt? Could patterns, prompts, or responses gradually change in relation to a weaver's history and evolving practice?

In this prototype, memory is used primarily for identification and session history. The broader question remains open: what might emerge when a ritual object is able not only to remember, but to grow alongside the people who use it?

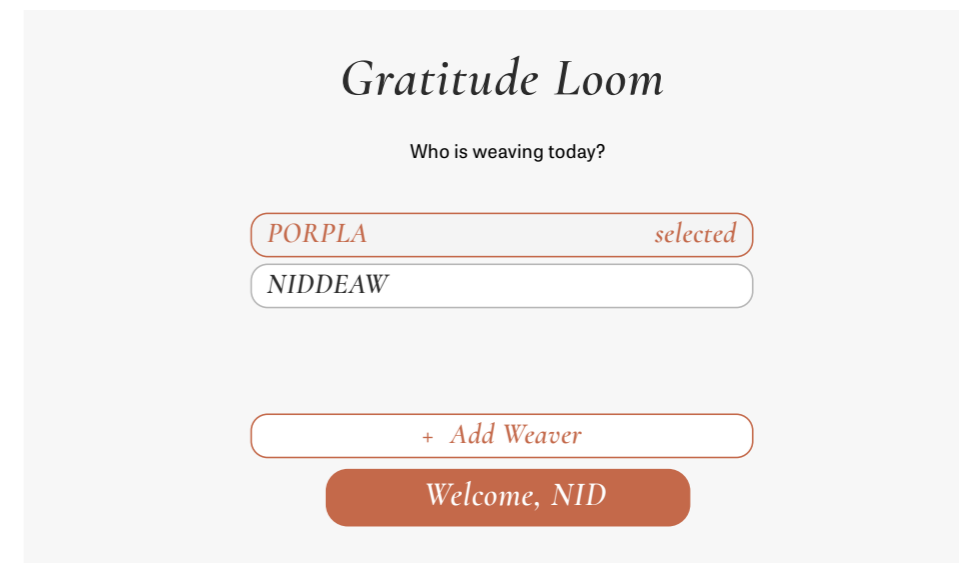
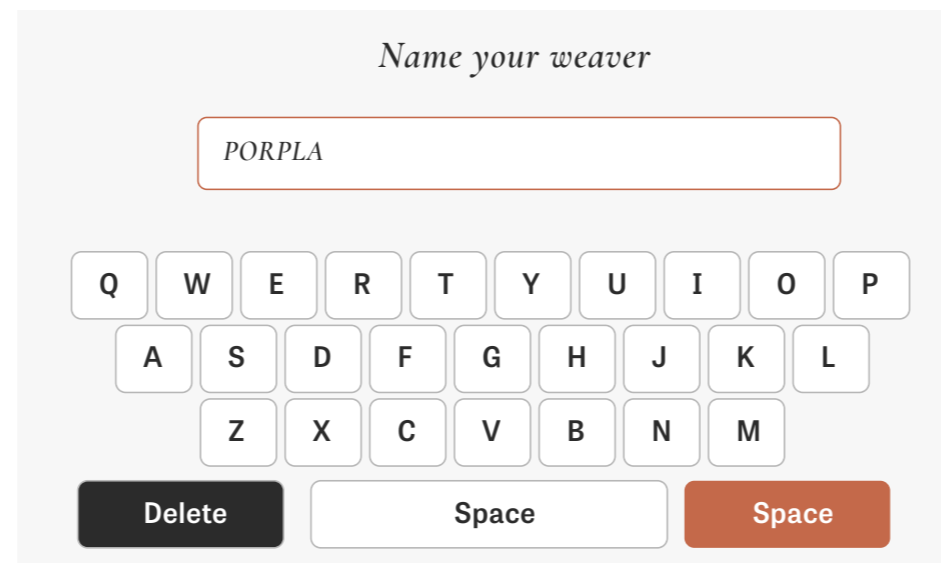
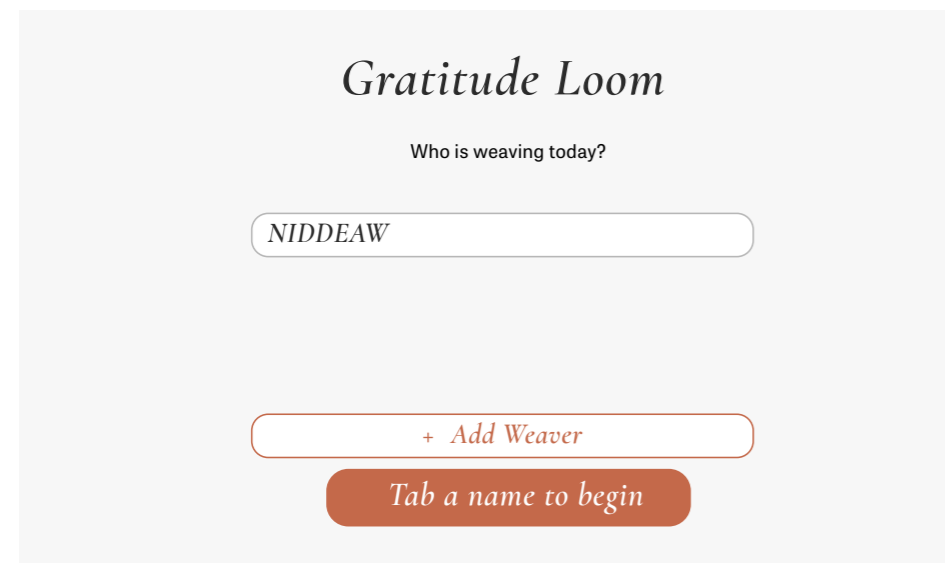


Figure 11: Welcome Flow

The sequence of screens guides the weaver from greeting to identity selection or creation, establishing presence and continuity within the ritual

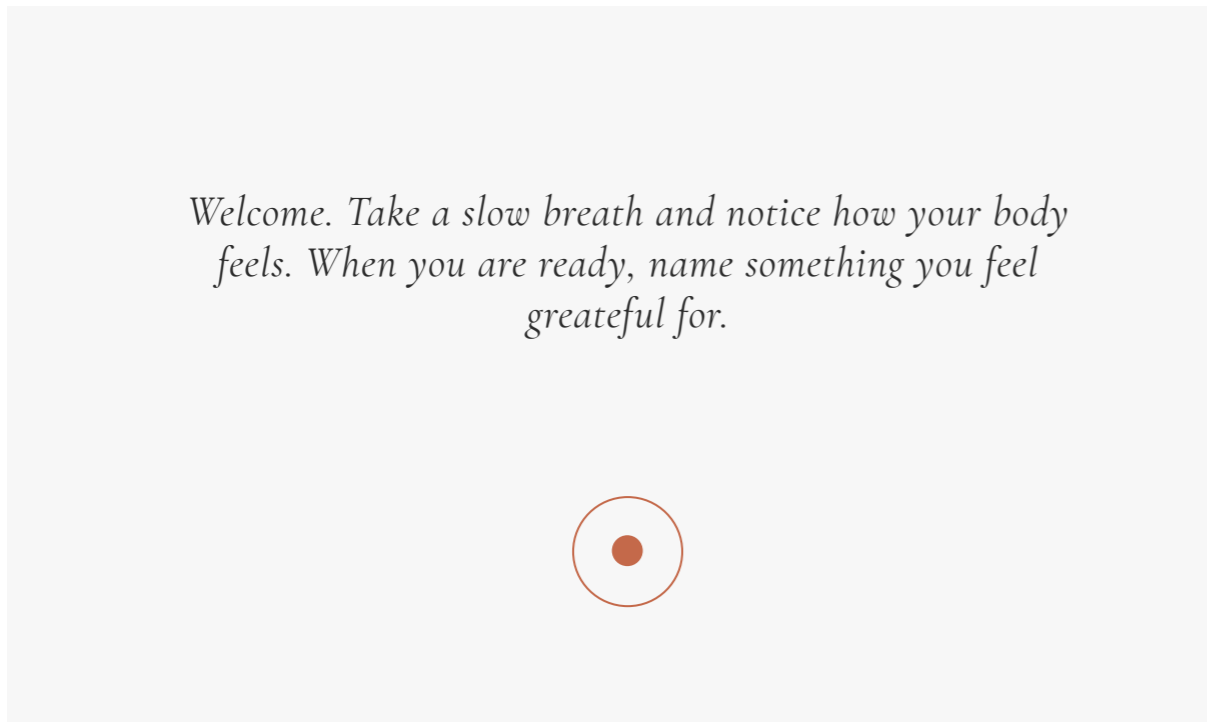


Figure 11: Conversation Screen

The loom invites the weaver to arrive, slow down, and begin with intention.

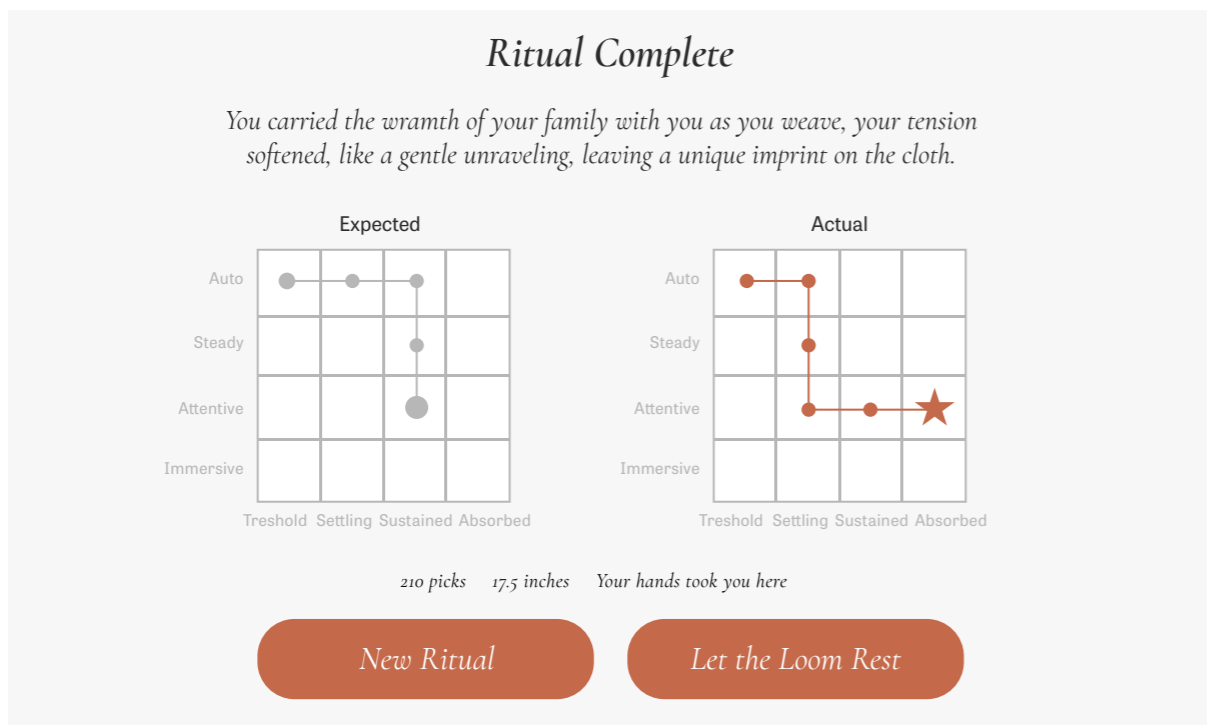


Figure 12: Closing Screen

The ritual closes with reflection. The weaver sees their journey, and chooses what comes true.

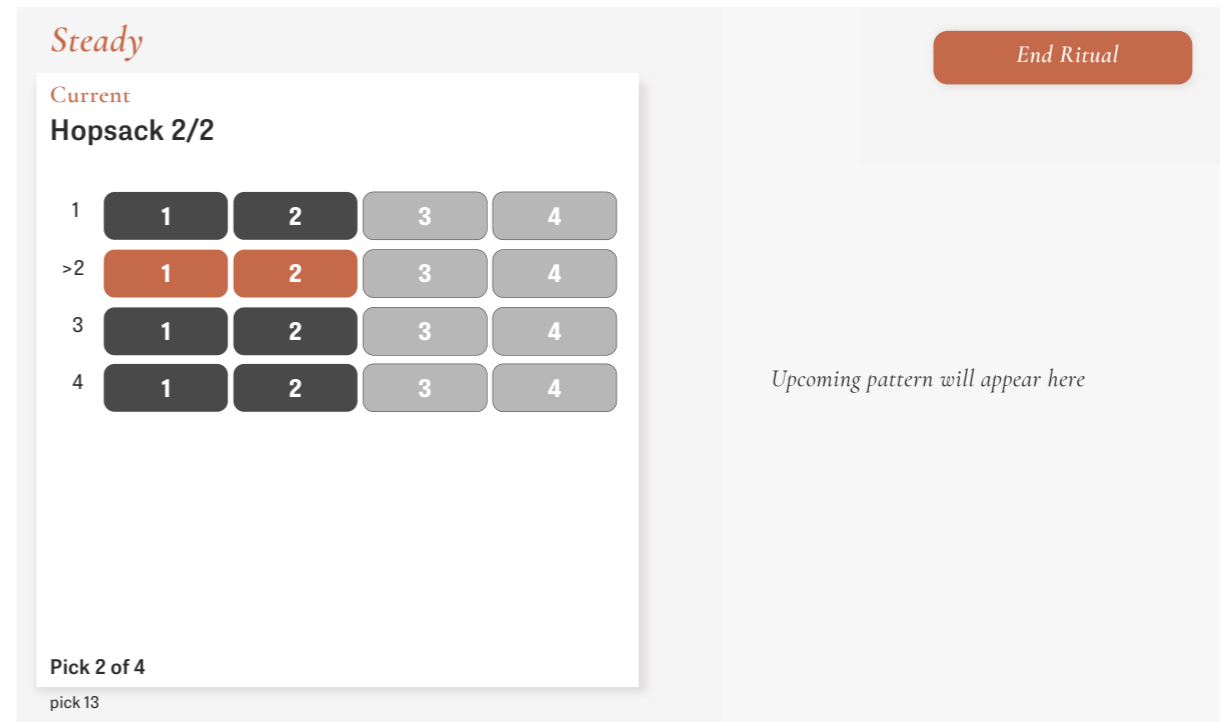




Figure 13: Pattern Screen During Weaving and Transition

The current pattern is shown on the left. When sustained rhythm and pattern completion are achieved, the upcoming pattern is revealed on the right, preparing the weaver for the next transition.

In the Browser

The browser dashboard captures each session, revealing the patterns behind presence

LIVE

 View ritual data as it unfolds.

REFLECT

 Revisit conversations and session histories.


REVISIT & ARCHIVE

 Export and preserve sessions over time.

Figure 14: Browser Dashboard
 A live and archival view of the ritual, combining conversation history, session data, and visualizations of presence over time.

Past Sessions

- 2026-05-22 • 10:30 AM • 20 mins
I'm grateful for my body.
- 2026-05-20 • 07:30 AM • 15 mins
I'm grateful for sunshine.
- 2026-05-19 • 09:30 PM • 40 mins
I'm grateful for Artificial Intelligence.
- 2026-05-17 • 06:30 PM • 28 mins
I'm grateful for my ability to learn from my mistakes.
- 2026-05-14 • 08:30 AM • 50mins
I'm grateful for life.

Gratitude Loom Journal

TODAY'S DATE: 2025-05-23 • 08:30 am • 25 mins

TODAY I'M GRATEFUL FOR
I'm grateful for my family

TODAY'S INTENTION
My body is feeling a bit tense and I would like to take

Conversation

PORPLA
I'm grateful for my family.

LOOM
You named your family. There's a quiet strength in naming the people who hold you.

LOOM
How's your body feeling right now? And how would you

LOOM
My body is feeling a bit tense and I would like to take

Data

Scores

0.86 RHYTHM | 0% SHUTTLE | 0% SHFT

QUALITY: DEEPLY PRESENT | FLOW: | GEN:

Shafst

1 2 3 4

UPCOMING: NONE

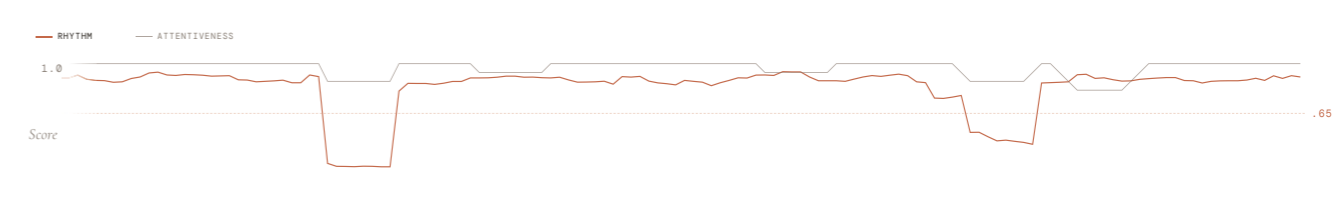
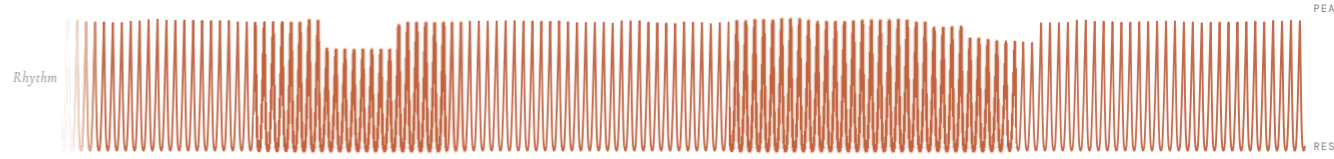
Journey-

EXPECTED | ACTUAL

	Threshold	Setting	Sustained	Absorbed
Automatic	●	●	●	●
Steady	●	●	●	●
Attentive	●	●	●	●
Immersive	●	●	●	●

Visualization

SCORE • RHYTHM CLOTH

PEAK REST

HOP-01 HOP-02 GEN-1779471893 HOP-02 TWI-03 TWI-04 GEN-1779472110 TWI-04 TWI-06 TTW-04

100 150 200 39

The Cloth

The cloth gives physical form to presence, carrying traces of how the ritual was lived in that moment.

Every weaving session leaves traces in the textile. Variations in rhythm, attentiveness, and pattern transitions become visible through the cloth itself. A weaver who moves with care may produce more even selvages, steadier surfaces, and clearer transitions. Moments of rushing, hesitation, or adjustment leave their marks as well. The cloth records not only what pattern was woven, but how it was woven.

Unlike the dashboard, which preserves a digital trace of the ritual, the cloth preserves a material one. It holds no scores, transcripts, or explanations. Instead, it carries the accumulated effects of attention, rhythm, decision, and touch. What remains is not a representation of presence, but evidence of its practice.

No session can be repeated exactly. Even with the same gratitude, intention, pattern, and weaver, the cloth will emerge differently. Each textile records a particular encounter between body, machine, and material at a specific moment in time.

Over days, months, or years, these textiles accumulate into an archive of practice, each carrying traces of a ritual that can be remembered, but never recreated.

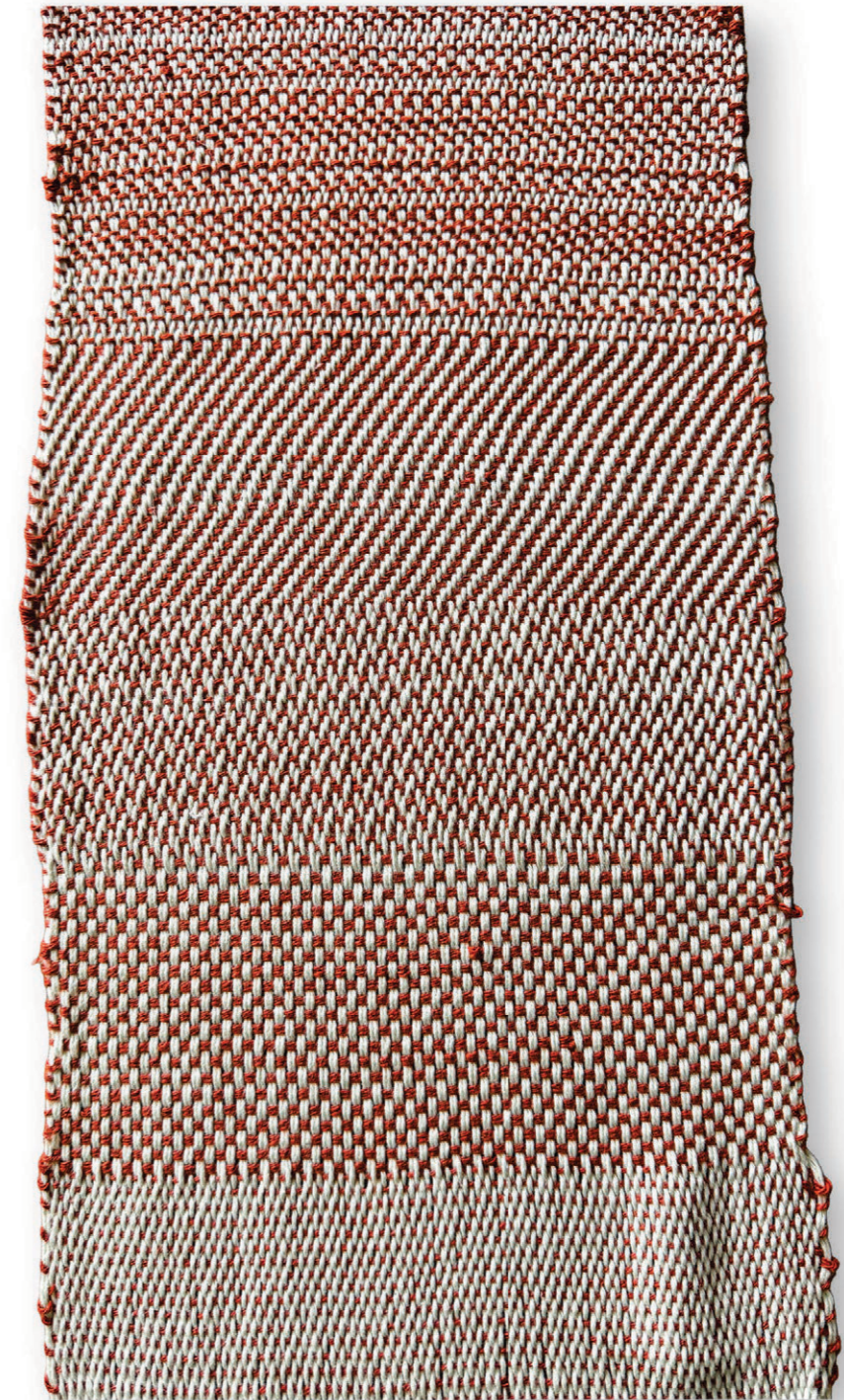


Figure 15: Cloth as Record
Each cloth carries the accumulated effects of attention, rhythm, decision, and touch from a particular moment in time .

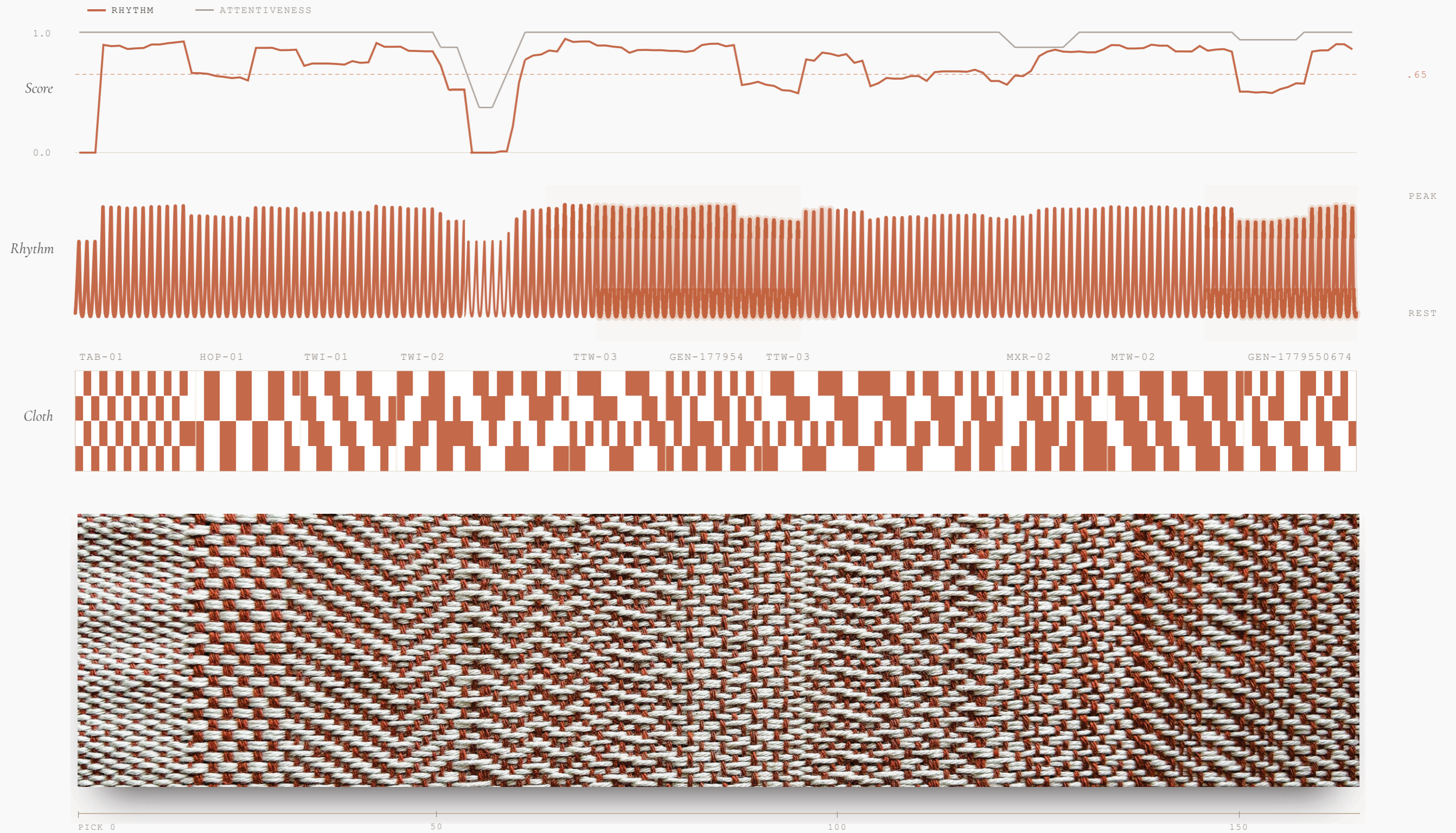


Figure 16: Traces of Presence in the Textile
Session data and woven output aligned across time, revealing how shifts in rhythm and attentiveness become material traces in the cloth.

Reflection

WHAT THIS PROTOTYPE IS

Gratitude Loom began with a question: could intelligence be designed not to accelerate attention, but to help sustain it?

The project became an experiment in designing for presence through the interaction of body, material, ritual, and computation. While intelligence is an important part of the system, I became increasingly interested in the relationship between the weaver, the loom, and the cloth. The more time I spent weaving, the more I realized that the loom already embodied many of the qualities I was seeking. Rhythm, repetition, resistance, and feedback were already there. The challenge was not to invent them, but to work with them.

Coming into Fabricademy, I had no background in weaving or textiles. I was fascinated by how strongly the material itself shapes experience. The loom does not simply receive instructions; it pushes back. It has its own logic, pace, and constraints. In many ways, the project became an exploration of how intelligence might collaborate with existing structures rather than replace them.

WHAT'S NEXT

Gratitude Loom is an early experiment rather than a finished answer.

One question that continues to interest me is how ritual might evolve over time. The current system responds to a single session, but future iterations could explore longer relationships, allowing the Loom to remember, adapt, and grow alongside a weaver's practice while remaining grounded in reflection, presence, and care.

I am also interested in collective ritual. The current loom is designed for one person at a time, yet weaving has historically been a social practice. What happens when multiple people, together in the same room or across different places, participate in a shared ritual? Can attention, gratitude, and presence be cultivated collectively as well as individually?

These questions feel less like features to add and more like directions for continued inquiry.

Gratitude Loom is only one expression of a larger interest in ritual, embodiment, and technologies that support presence. The work will continue to evolve, but the questions remain the same.

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Continue the Thread

Thank you for spending time with Gratitude Loom.

If this work resonated with you and you would like to support future explorations in ritual, craft, embodied interaction, and contemplative technology, you can continue the thread here:

ko-fi.com/porpla

For future work, writings, and updates:

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[@openrituallab](https://twitter.com/openrituallab)

