

Verified progress: robotics and learning

October 16, 2026 | Companion to the reusable pitch packet

Kira World contains a **ROS 2 intention-bridge software prototype**. It provides a concrete starting point for university robotics collaboration. Source review confirms its interfaces and policy/session implementation; operating a robot remains a future validation milestone.

What already exists in the robotics bridge

Four typed intentions	Speech, gaze, expression and gesture have bounded ROS 2 message definitions and a policy-admission node. The node can report policy acceptance or rejection. Acceptance alone does not establish physical execution.
Standalone session reference	Implemented software includes replay checks, one in-flight action, session time limits, heartbeat/disconnect handling and a mock lifecycle. Hash-linked evidence has a separate verifier.
Recorded software results	The repository report dated August 18, 2026 records 88/88 standalone tests and 18 mock lifecycle records . Current source contains 88 test methods. This review did not rerun them or recover the original execution logs or exact tested commit.

What a university can help demonstrate next

Build the pinned workspace on an agreed ROS 2 distribution, map intentions to an approved simulator, and record four valid requests, one rejection and disconnect handling. Then validate authenticated session attachment and authoritative execution status before considering a physical endpoint.

Current boundary

No ROS 2 workspace build, confirmed simulator execution, live NewBrain attachment or physical robot operation has been demonstrated. Production authentication, a distributed single-session lock and durable replay protection remain future work. No device compatibility or institutional endorsement is claimed.

Evidence and access

Public overview: kiralabs.org/companion-robotics.html

Source reviewed at KiraWorld commit **9252ce8d300e** (full identity in the retained research record). The source repository requires authorized access. The dated validation report is under `integrations/hanson_ros2_bridge/docs/VALIDATION_REPORT.md`.

A completed control and a specific repair lead

Independently measured learning score: 2/12, unchanged.

Qwen comparison: **untested**. The new diagnostic below is a completed control, not a benchmark improvement.

What the new control actually measured

The no-update branch completed **18 objective evaluations** and **two generated responses**, with zero training updates. Parameter hashes matched and all ten measured parameter-block changes were zero. Original evidence, cleanup and independent review were completed.

On this public diagnostic case, the answer was already correct before teaching: the model assigned it **99.91045%** probability. It remained unchanged afterward. This case therefore does not demonstrate acquisition of a new association.

The useful finding: training objectives can compete

Average loss totaled **7.80744**: answer **0.000224**, source/version fields **4.62165** and end-of-answer marker **3.18556**. Almost all loss came from the non-answer targets. On one checked direction, improving the answer component increased total loss. All 24 defined central-difference comparisons agreed with their predeclared tolerance.

This identifies a measured local conflict worth investigating. It does **not** establish the cause of the historical 2/12 result. The remaining matched correct-label, incorrect-label and unknown-label controls must run before separately changing answer/format weighting or routing. Fresh independent scoring is required to report a learning gain.

Memory, body work and the support request

This control passed the existing **8 GiB startup guard**; the minimum of 823 available-memory samples was about **12.88 GiB**. A 4.76 MB issuer report completed within its existing 8 MiB limit. More RAM and a suitable GPU can support larger comparisons and simulations; objective conflicts also require software investigation.

The separate body control demonstrated movement of **512 sampled weighted skin vertices** and measured exact restoration. Coupled lung-brain physiology and a lung demonstration video remain unrun. A home research server, secure home-to-lab transfers and collaborators in AI, robotics, physiology and medical imaging would support the next measurable milestones.

Meeting wording: "We have a reviewed robotics software bridge, recorded standalone test results, a measured skin control and a newly completed learning diagnostic. We are seeking laboratory collaboration to convert these foundations into independently validated learning, simulator and body-system demonstrations."