

Kognitive Project Update

Milipol TechX 2026 — Cognitive Robotics Demo

Week of February 10, 2026

Sprint 1: COMPLETE — Sprint 2: IN PROGRESS

Dashboard UI

Camera Stream Dashboard

- Multi-camera monitoring system with live streaming
- Real-time metrics: bandwidth, latency, FPS

- **KLASS Cognitive Robot** • IDLE
- To exit full screen, press and hold **Esc**

Video Feed
Awaiting video stream...

VLM: Waiting for video input...

ROBOT REASONING

```
graph TD; A[Open] --> B[Initialize]; B --> C[Plan]; C --> D[Execute]; D --> E[Track];
```

LIVE TRANSCRIPT

No messages yet. Start a conversation...

No reasoning data available yet...

Face Recognition Data Collection

Video Data Collection System

- Multi-camera video streaming for training data
- Face detection and recognition pipeline

The screenshot displays the Ghost V60 Camera Dashboard, a web interface for managing video streaming. At the top, it shows the system name 'Ghost V60 Camera Dashboard' and 'Stream Monitor & Recorder'. The IP address '192.168.168.105' and a 'CONNECTED' status are visible. Below this, there are tabs for 'Primary Cameras' and 'Secondary Cameras'. A control bar includes buttons for 'Record All', 'Stop All', and 'Download All', along with 'All On' and 'All Off' options. A status bar provides overall system metrics: 'TOTAL BW: 2.47 MB/s', 'AVG LATENCY: 128 ms', 'ACTIVE STREAMS: 3 / 6', 'UPTIME: 00:00:08', 'DROPPED FRAMES: 0', and 'RECORDING: 0'. The main area features three camera feeds:

- Front Left (AR0234):** Shows a room with a desk and a large window. Performance metrics: 0.41 MB/s, 151 ms latency, 21.0 FPS, 21 KB frame size.
- GoPro (HDMI CAP):** Shows a close-up of a desk and window. Performance metrics: 1.68 MB/s, 83 ms latency, 13.8 FPS, 136 KB frame size.
- Front Right (AR0234):** Shows another angle of the room. Performance metrics: 0.38 MB/s, 126 ms latency, 18.9 FPS, 28 KB frame size.

Each camera feed includes a 'VAL2' button and a 'Rec' button. The dashboard also features a 'Snap' button and a 'Save' button for each camera view.

Sprint 2 Priorities

Feb 13 - Feb 26: Speech Loop Works

- End-to-end conversation flow
- State machine implementation
- DAG planning with LLM integration
- KlassUI Dashboard scaffold
- WebSocket connections to all services
- Basic scenario testing

TARGET E2E LATENCY

< 5 seconds

STT ACCURACY

> 90%

SCENARIOS

1 & 2 Working