GLASS-BRW is a precision-gated, interpretable decision layer designed for high-stakes classification systems where incorrect actions are more costly than deferred ones. Instead of forcing predictions everywhere, it applies symbolic rules only when they meet strict empirical precision guarantees and explicitly abstains otherwise. This ensures that every decision made by the system is defensible, auditable, and explainable.

The system operates as a rule-based reasoning stage inside a hierarchical ensemble. Customers are deterministically mapped into human-interpretable segments, from which simple, bounded-complexity rules are generated. A constrained optimization process selects a small, diverse set of high-precision rules, and a first-match-wins execution model guarantees that each prediction is driven by exactly one rule. Ambiguous cases are intentionally routed to downstream statistical models better suited for continuous uncertainty.

GLASS-BRW is built for environments where trust, transparency, and operational safety matter more than raw coverage. It does not replace probabilistic models; it gates them. By separating signal discovery from execution-grade decisioning and treating abstention as a first-class outcome, the architecture delivers reliable, interpretable decisions without hiding uncertainty or over-fitting symbolic logic.