Curriculum-Gated Adaptive Learning Platforms

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Educational platforms traditionally advance students by time (semesters) or completion (finishing assignments). Curriculum-gated adaptive learning advances students by demonstrated mastery, using the architecture's cognitive domain fields to govern learning pace, content exposure, and assessment depth. Students progress when they demonstrate genuine understanding, not when they have simply spent time.

What It Is

Curriculum-gated learning applies the architecture's skill gating framework to educational content. Each curriculum unit has mastery gates that must be passed before the next unit is accessible. The gates evaluate genuine understanding through multimodal assessment rather than rote completion. Cognitive domain fields track the learner's confidence, engagement, and knowledge trajectory to optimize pacing.

Why It Matters

Time-based progression produces students who advance without mastery, accumulating gaps that compound over time. Completion-based progression rewards effort over understanding. Mastery-gated progression ensures that each learning unit builds on a foundation of genuine understanding of prior units, producing more robust knowledge structures.

How It Works

The learner's cognitive state is modeled through domain fields that track confidence in specific knowledge domains, engagement patterns that indicate effective learning, and knowledge trajectory that predicts readiness for new content. The curriculum engine uses these fields to select appropriate content, adjust difficulty, and determine when mastery gates should be evaluated.

Mastery evaluation is multimodal: not just test scores but demonstrated application, teaching-back ability, and transfer to novel contexts.

What It Enables

Curriculum-gated learning enables educational platforms that adapt to each learner's genuine capability and pace. Fast learners progress rapidly through mastered content. Struggling learners receive additional support and alternative explanations without being advanced prematurely. The result is a learning experience tailored to actual understanding rather than assumed readiness.

Applications All 21 steps →

Same primitives. Different domains. One architecture.

Primary Technical Disclosure
○ One Architecture, Every Domain: How the Same Cognitive Primitives Parameterize Across Autonomous Vehicles, Defense, Companion AI, and Therapeutic Agents
Secondary Technical
○ Confidence-Governed Autonomous Driving Decisions○ Quorum-Based Engagement Authorization for Defense Systems○ Narrative Unlock Engine and Relationship Milestones for Companion AI○ Attachment Challenge Module: Testing Relational Health○ Skill-Gated Relational Readiness for Social Platforms○ Fleet-Level Affective State Aggregation for Traffic Management○ Therapeutic Relationship Integrity for AI-Assisted Therapy○ Physical Capability Envelopes for Embodied Robotics● Curriculum-Gated Adaptive Learning Platforms○ Continuity-Based Facility Access Control○ Confidence-Governed Financial Trading Systems○ Rights-Grade Content Generation With Provenance Tracking○ EU AI Act Structural Conformity Through Architecture
Applications (General)
○ Autonomous Vehicle Full-Stack Governance From Sensor to Motor○ Defense Engagement Authorization Through Multi-Level Confidence○ Full-Stack Cognition Architecture for Healthcare○ Full-Stack Cognition Architecture for Financial Services○ Full-Stack Cognition Architecture for Education○ Full-Stack Cognition Architecture for Smart Cities○ Full-Stack Cognition Architecture for Manufacturing○ Full-Stack Cognition Architecture for Agriculture
Applications (Specific)
○ Waymo's Stack Lacks Unified Cognitive Governance○ Anduril's Defense Stack Needs Unified Cognitive Governance○ Epic Systems Needs Cognitive Governance for Clinical AI○ Bloomberg Terminal's AI Needs Unified Cognitive Governance○ Tesla Robotaxi Optimizes Driving, Not Cognitive Architecture○ Lockheed Martin Automates Targeting, Not Engagement Governance○ Siemens Healthineers Automates Diagnosis Without Cognitive Governance○ Palantir AIP Deploys LLMs Without Cognitive Architecture○ C3 AI Provides Enterprise AI Applications Without Cognitive Coherence○ UiPath Automates Tasks Without Cognitive Governance
Applications overview →
AQ
deterministic
autonomy

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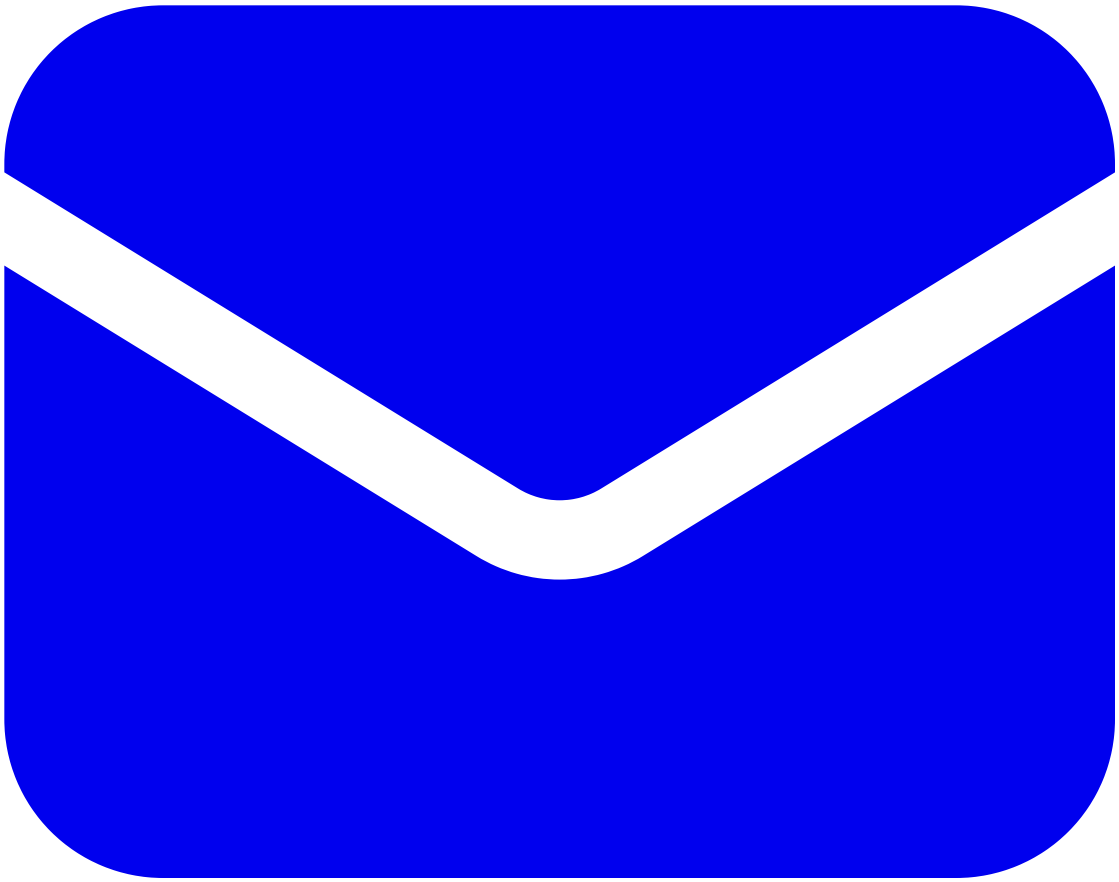

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