

Artificial Genius Intelligence (AGI²)

Energy■Bound Discovery through Distributed Specialist AI

Author: Joe R. Noles

Date: October 2025

Artificial Genius Intelligence (AGI²) reimagines artificial intelligence as a distributed network of slow■clock, energy■efficient, domain■specialized machine geniuses. Rather than one massive, general■purpose system, AGI² proposes a society of focused intelligences—each pursuing deep understanding within a single discipline, collaborating asynchronously through validated discovery networks. The system measures success not in FLOPs per second, but in Joules per Discovery (J/D).

1. Background

The scaling laws of modern AI have driven exponential capability growth at enormous energy cost. AGI² is inspired by human history, where a handful of extraordinary minds produced civilization's transformative leaps, each operating on roughly 20 watts of power. This insight motivates a reorientation of AI around efficiency, architecture, and patience—rather than brute compute.

2. Concept: Artificial Genius Intelligence (AGI²)

AGI² defines a new AI category distinct from AGI and ASI. It prioritizes specialization, depth, collaboration, and efficiency. Each artificial genius is optimized for sustained reasoning, long-horizon learning, and verified discovery.

3. Architecture Overview

AGI² systems progress through five phases: foundation pretraining, specialist creation, energy adaptation, deployment, and long-horizon discovery. These systems operate on neuromorphic or near-memory hardware, exchanging validated findings through an asynchronous coordination layer—the blackboard network.

4. Joules-per-Discovery Framework

J/D quantifies the energy cost per validated discovery. Each genius logs compute, memory, and communication energy during hypothesis generation and validation. Agents then adjust clock rates and sparsity to minimize their J/D ratio—making energy efficiency a dynamic control loop.

5. Advantages of AGI²

Energy Efficiency: 10,000x lower operating power than datacenter AGI.

Safety: Independent, auditable minds prevent runaway failure.

Sustainability: Operates within global energy limits.

Innovation: Fosters long-term, integrative discovery.

6. Implementation Roadmap

Phase I (1-2 yrs): Convert existing models to domain-specialists with J/D logging.

Phase II (3-5 yrs): Deploy slow-clock, neuromorphic Einstein prototypes.

Phase III (5-10 yrs): Form a global collective of artificial geniuses.

7. Policy and Intellectual Property

AGI² introduces a patentable control system for optimizing distributed AI agents by minimizing Joules per Discovery. The term 'Artificial Genius Intelligence' should be trademarked to preserve conceptual clarity and public trust.

8. Conclusion

Artificial Genius Intelligence shifts the goal of AI from scale to insight. By measuring progress in Joules per validated discovery, we can align machine intelligence with nature's efficiency—thinking longer, consuming less, and discovering more.

Contact: info@artificialgeniusintelligence.com

Website: <https://artificialgeniusintelligence.com>