Google Expands Gemini as the AI Compute Squeeze Tightens

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Google combined a broad Gemini rollout with a $920 million-per-month compute contract, while OpenAI and Epoch underscored how tight the infrastructure market has become. The brief also covers Anthropic's tougher warning posture, MIT's self-revising AI scientist, and notable new launches from OpenAI, Google, and Cursor.

Top Stories

Why it matters: the biggest story was no longer just new models, but who can fund, supply, and safely steer them.

- **Google paired a broad Gemini rollout with a huge compute commitment.** Google announced Gemini Omni for video generation from image, audio, video, and text; Gemini 3.5 as its latest model family starting with 3.5 Flash; new AI Search features; Gemini app updates including daily briefs and Spark; broader SynthID verification; and real-time image creation and editing in Gemini Live [1, 2]. Separately, a SpaceX filing said Google will pay $920 million per month from October 2026 through June 2029 for compute capacity including about 110,000 NVIDIA GPUs, while retaining ownership of its models and data [3].
- **Compute scarcity is becoming a first-order constraint.** OpenAI CFO Sarah Friar said compute is extremely scarce and expects supply constraints to remain severe through 2027 [4]. OpenAI's frontier models are being trained on Stargate Abilene and Microsoft Fairwater, with the next major training run expected on Nvidia's Vera Rubin platform; it is also diversifying beyond Nvidia to AMD, Cerebras, and a Broadcom custom chip [5, 4]. Epoch AI estimated AI-related data-center, hardware, and network-

ing investment reached about 0.8% of U.S. GDP in Q1 2026, pushing total computing infrastructure to about 1.5% and making AI infrastructure the leading driver of private-investment growth [6, 7].

- **Anthropic paired stronger warnings with a concrete science result.** Anthropic said internal data shows Claude is accelerating AI development and could be creating a path to recursive self-improvement faster than expected [8]. A WSJ-cited report said Anthropic has urged a global pause in AI development [9]. At the same time, Anthropic said Claude Opus 4.7 matches, and on some tasks beats, dedicated NMR software for determining molecular structures [10].

Research & Innovation

Why it matters: the most useful research updates focused on systems that can revise their own reasoning, see space more precisely, or act in the physical world.

- **MIT proposed a self-revising AI scientist.** The framework moves beyond search in a fixed scientific vocabulary by allowing verified schema expansion - adding new variables, tools, and verifiers - with objective novelty measurement; case studies covered protein compliance and fiber-network stiffness [11, 12].
- **NVIDIA's LocateAnything targets a core VLM bottleneck.** The 3B model uses Parallel Box Decoding to predict full boxes in one pass, runs on consumer GPUs, was trained on 138M queries and 785M boxes, and reaches 12.7 boxes per second on one H100 with better high-IoU accuracy [13, 14, 15, 16, 17].
- **Physical AI kept advancing at CVPR.** NVIDIA highlighted GraspGen-X for zero-shot grasping, LCDrive for latent driving representations, and NitroGen for gameplay-based embodied training; NitroGen received a CVPR Best Paper Honorable Mention [18, 19].

Products & Launches

Why it matters: the most notable launches improved security, local deployment, and human-agent interaction.

- **ChatGPT Lockdown Mode** is now available on all plans, limiting outbound network requests to reduce prompt-injection-based data exfiltration, with tradeoffs intended for higher-risk users [20].
- **Gemma 4 QAT** pushes local AI further: Google said quantization-aware training cuts memory needs while preserving quality, with Gemma 4 E2B running in about 1GB and 26B-A4B fitting in 16GB RAM [21, 22].
- **Cursor Design Mode** lets users point, draw, or talk to update UI with visual prompts, aiming to narrow the gap between what a user sees and what the agent understands [23, 24].

Industry Moves

Why it matters: labs and platforms are still reorganizing around capital intensity, data pipelines, and self-improving systems.

- **Meta is exploring a major equity raise for AI capex.** Reports say it is considering selling tens of billions of dollars in new shares following Google's large raise [25].
- **Sakana AI opened an RSI Lab in Tokyo.** The new group says it will pursue open-ended, sample-efficient recursive self-improvement on modest compute rather than brute-force hyperscale clusters, and is hiring frontier scientists and engineers [26].
- **Microsoft exposed more of its MAI training pipeline.** New details on MAI-Thinking-1 describe 30T pretraining tokens plus 3.55T midtraining tokens, with no third-party distillation and no open-source training datasets [27].

Quick Takes

Why it matters: a few smaller updates still sharpen the picture.

- University of Cambridge researchers said the world's first AI-designed vaccine component has now been tested in humans; a 39-person phase 1 study found safety and a modest immune response, with a larger study underway [28].
- Artificial Analysis said Google's open Gemma 4 12B supports transcription, but at 8.8% AA-WER it trails dedicated open transcription models such as Voxtral [29].
- Factory Router says it can maintain frontier performance while cutting costs 25%; one post said private-preview users saved about $13M in the last 30 days [30, 31].
- Magenta RealTime 2 is a live music model from Google Magenta with about 200ms end-to-end latency that runs locally on a MacBook [32].

Sources

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