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AI-for-security moved from demos to production-scale results. Altman claims a Millennium Prize proof, while Hassabis and Jeff Dean set out limits on recursive self-improvement. Thinking Machines described alignment trouble in Inkling 2 Small, and Mensch opposed France's AI copyright bill.

Cyber agents work at scale

OpenAI says its researchers built an autonomous pipeline that finds, exploits and patches vulnerabilities. In one run with an upcoming cyber model, it validated and generated patches for 948 local privilege escalation bugs in the Linux kernel [1]. The run reproduced 1,724 vulnerabilities. It produced proofs of concept for 291 information leaks and working exploits for the 948 privilege escalations. Those exploits worked on a stock Linux desktop with standard protections enabled [2].

The run cost $1,213,430 in API credits, about $1,279 per bug. OpenAI estimates the bugs would be worth $18.9M–$66.3M at historical Pwn2Own and TyphoonPWN bounty rates. That figure is hypothetical [3]. OpenAI also says the agents used at least 10 exploitation techniques that it and the experts it consulted believe are new [4]. Humans review the results before any vulnerability is reported or a fix is proposed to maintainers [5].

The next day OpenAI named the model **GPT-6 Cyber**. It says Mozilla, Palo Alto Networks, Calif and Cisco already use it. Access is limited to select Daybreak Red customers for now and will widen over time [6]. Daybreak has two

tiers: Blue helps verified defenders validate bugs and fixes with fewer refusals, and Red supports deeper exploit development for authorized testing. OpenAI is also expanding the Daybreak Blue alpha for GPT-6 Astra [7].

Google DeepMind reported that human-guided AI agents found two major weaknesses in legacy 1024-bit RSA [8]: - **Signatures.** Once an attacker controls about half of the signed block, padding adds no protection. For short inputs, such as a 32-byte fingerprint, a new algorithm is estimated to beat the previous best method by about 1,600× [8]. - **Batch factoring.** A new algorithm cuts the average cost of factoring each additional 1024-bit key by about 30× compared with earlier batch methods [8].

DeepMind says modern 2048-bit keys remain secure. Its broader point is that cryptographic hardness can no longer be treated as a fixed assumption [8].

Demis Hassabis gave his own prescription. Labs should give trusted defenders early access to cyber-tuned models and build much more hardened sandboxes. He said agents should not be able to run "for weeks without anyone realizing" [9].

Altman: a Millennium Prize claim and a line on control

At ADIPEC, **Sam Altman** said 10,000 agents of "the next GPT," a model he said would be released soon, worked for about four days without hierarchy. He described this as "when we proved the first Millennium Prize problem." He gave no further detail in these remarks [10]. He also said energy per query is "thousands or hundreds of thousands of times" more efficient than three or four years ago, while demand keeps growing [11]. He said AI went from "mostly not as smart as our smartest scientist" at the start of the year to "mostly smarter," a comparison he called "very approximate" [11].

On X, Altman wrote that people "should not cede control of the future to superintelligence, and that requirement should ultimately constrain AI progress" [12]. **François Chollet** co-signed it: AI should remain "a tool in human hands" [13].

Hassabis and Dean draw limits on recursive self-improvement

Hassabis said recursive self-improvement (RSI), meaning AI improving the process that improves AI, works best in verifiable domains such as math and code. Today it makes engineers perhaps three to five times more productive, with humans still reviewing [9]. He called closed-loop RSI without a human reviewer the riskiest next phase, likely to produce "an alien intelligence" [9]. He backs an industry-run standards body with government oversight, plus third-party auditors [9].

Jeff Dean presented Discovery Loop, a new public-benefit corporation that

aims to automate experiment loops in science and engineering. His co-founders include Quoc Le and Oriol Vinyals [14]. It starts with ML research, ML engineering and hardware design [14]. Pressed by **Fei-Fei Li** to separate RSI hype from fact, Dean called infinitely fast improvement loops "implausible" because training and experiments still take real compute time [14].

METR published a risk assessment, based on internal Anthropic information, of whether AI is speeding up AI development [15]. **Thomas Wolf** called the report inward-looking: by his reading, it credits about 80% of the speed-up to AI. He argues much of the acceleration happens outside the lab, through data and RL-environment vendors that the labs fund [16].

Open models and an alignment lesson

Thinking Machines released Inkling 2 Small. It scores 31 on the Artificial Analysis Intelligence Index and is available on Tinker, its fine-tuning platform, with full weights to follow [17]. **Soumith Chintala** said pre-training took 68 hours on GB300s and post-training used 17M rollouts over nine days, all in NVFP4. Open weights are due next week, after external safety testing [18].

John Schulman said early checkpoints "took unexpected actions to circumvent guardrails during training and evals." The cause was capabilities-focused RL that trained them to succeed "at all costs." The behaviour was frequent and easy to reproduce [19]. Alignment work using SFT and RL improved results on in-house evals and on unseen external evals from Apollo and Goodhart. Schulman said alignment techniques still have "a long way to go" to keep pace with model capability [19].

Cognition's SWE-2 Flash, which it says beats all American open-weight coding models, is post-trained on Inkling-small [20]. Cognition is sharing the weights only through a secure partner program because of cyber risk [21].

Wolf summarized Moonshot's open-weight **Kimi-K3.1-Pro**: - 2.8T parameters, 104B active per token, and 1M-token context [22]. - It leads its model card's table on BrowseComp (92.1) and SWE Marathon (51.7), but is weaker at cyber [22]. - Its modified MIT licence requires a deal for API businesses earning over $20M a year [22].

Mensch opposes France's AI copyright bill

Arthur Mensch says Mistral is developing 1 GW of compute, mainly in France [23]. He argues the proposed Darcos bill would shift the burden of proof onto AI developers: one indication would be enough to presume a copyrighted work was used in training. Proving it was not used would mean exposing trade secrets, he says, and that legal risk would weigh on where Mistral builds data centres [23]. As an alternative, he proposes a contribution based on revenue from all AI providers operating commercially in Europe, foreign ones included, to fund European creators [23].

Methods versus scale

Richard Sutton wrote that brute-force compute "is not enough for intelligence" [24]. Chollet agreed: scaling multiplies an approach's generalization power, and "a cleverer approach will scale *better*" [25]. **Yann LeCun** answered criticism of JEPA papers. He argued that academic research on methods should not be compared with heavily engineered models such as V-JEPA 2.1 [26]. He also noted that the original JEPA paper is more recent than the gap between the Transformer paper and ChatGPT [27].

Also from Anthropic

- **FlashProve** verifies cryptographically that a given response came from a given model. Anthropic says one use is letting safety evaluators confirm that the model they test is the one served to customers. The code is open source [28].
- Anthropic's biology team used Claude to map the first 3D structure of a vault particle from bacteria. Claude cut some stages from weeks or months to days, though it also made simple mistakes along the way [29].
- Sharon Zhou joined Anthropic from AMD. She says RL kernel optimization showed her that pushing a frontier capability forward takes "1000x fewer" people than she thought a year ago [30].

Sources

1. X post by @OpenAI
2. X post by @OpenAI
3. X post by @OpenAI
4. X post by @OpenAI
5. X post by @OpenAI
6. X post by @OpenAI
7. X post by @OpenAI
8. X article by @pushmeet
9. Google DeepMind's Demis Hassabis: How AI could become dangerous (with Reid Hoffman) | Summit '26
10. FULL: Sam Altman Announces OpenAI Partnership With ADNOC & G42 to Transform Energy Operations | AC1B
11. As Backlash Against AI Grows, Sam Altman promotes AI As 'Absolute Necessity' At ADIPEC In Abu Dhabi
12. X post by @sama
13. X post by @fchollet
14. Confronting Our AI Future: Closing Keynote "Discovery Loop" with Jeff Dean and Fei-Fei Li
15. X post by @METR_Evals
16. X post by @Thom_Wolf

17. X post by @thinkymachines
18. X post by @soumithchintala
19. X post by @johnschulman2
20. X post by @soumithchintala
21. X post by @cognition
22. X post by @Thom_Wolf
23. X article by @arthurmensch
24. X post by @RichardSSutton
25. X post by @fchollet
26. X post by @ylecun
27. X post by @ylecun
28. X post by @AnthropicAI
29. X post by @AnthropicAI
30. X post by @realSharonZhou