Weekly Progress Roundup

Covid is becoming milder, Boom is going supersonic, a Chinese AI model awes observers, and more.

MALCOLM COCHRAN JAN 26, 2025



XB-1 is about to go supersonic

Boom Supersonic, the aviation company trying to bring back supersonic commercial flight, will soon deliver on its trade name. Two weeks ago, their XB-1 prototype hit speeds just shy of sound. Crucially, XB-1 reached that milestone at a relatively low altitude, thereby subjecting the plane to greater stress than it will have to endure during its next test flight, which, in just a few days, may break the sound barrier.

Chinese AI model delivers top-class performance at low cost

to work with limited computational resources.

A Chinese quantitative trading company has released the first real competitor to American-made artificial intelligence. The model, DeepSeek-R1, performs as well or better than many leading U.S. counterparts and at a much lower cost. The economist Tyler Cowen and other observers have argued that DeepSeek's efficiency is an unintended side effect of U.S. chip export restrictions, which are forcing Chinese firms

An AI breakthrough from within an authoritarian state is not, of course, unambiguously good. Still, it is a testament to human ingenuity and the potential for even more resource-efficient models.

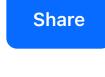
Covid is becoming milder

cold.

causing fewer hospitalizations and a lower rate of symptoms. While it's always possible that a new, more serious variant will rise in the future, the history of respiratory viruses suggests that we are witnessing a long-term process of diminishing virulence that may eventually relegate COVID-19 to the rank of common

The latest COVID-19 variant appears to be much less virulent than its predecessors,

Thanks for reading Doomslayer! This post is public so feel free to share it.



Culture & Tolerance:

Same-Sex Couples Wed as Thailand's Marriage Bill Takes Effect

Economics:

Wage Inequality Declined in Most Countries Since Start of 21st Century

Energy & Environment:

- Reserves of "Gold" Hydrogen May Be Lurking Beneath 30 US States
 China's "Artificial Sun" Shatters Nuclear Fusion Record

Health & Demographics:

- Ozempic-Style Drugs Tied to More than 60 Health Benefits
- New Al Method Improves Early Breast Cancer Detection

9 Countries Said Goodbye to a Devastating Disease in 2024

- 87 Percent of Population Now Has Clean Water in Cambodia
- AI-Developed Drugs Are Headed to Trial, DeepMind CEO Says
- Cardiovascular Disease Death Rates Have Fallen Rapidly in Many Countries

Science & Technology:

A New Paradigm of Materials Design with Generative Al

OpenAl's "Operator" Agent Can Buy Groceries, File Expense Reports

- Antivenom Renaissance: Using AI to Explore Antivenoms
- Training Computation of AI Systems Has Doubled Every Six Months
- 3D Printed Microscope Could Bring Microscopy to Millions
- Startup Trains GPT-4b Model to Extend Human Life
- Curiosities:
- Negative Online News Articles Are Shared More to Social Media