

RESEARCH

Introducing the AI Research SuperCluster — Meta's cutting-edge AI supercomputer for AI research

January 24, 2022



of our production systems

Developing the next generation of advanced AI will require powerful new computers capable of quintillions of operations per second. Today, Meta is announcing that we've designed and built the AI Research SuperCluster (RSC) — which we believe is among the fastest AI supercomputers running today and will be the fastest AI supercomputer in the world when it's fully built out in mid-2022. Our researchers have already started using RSC to train large models in natural language processing (NLP) and computer vision for research, with the aim of one day training models with trillions of parameters.

RSC will help Meta's AI researchers build new and better AI models that can learn from trillions of examples; work across hundreds of different languages; seamlessly analyze text, images, and video together; develop new augmented reality tools; and much more. Our researchers will be able to train the largest models needed to develop advanced AI for [computer vision](#), [NLP](#), [speech recognition](#), and more. We hope RSC will help us build entirely new AI systems that can, for example, power real-time voice translations to large groups of people, each speaking a different language, so they can seamlessly collaborate on a research project or play an AR game together. Ultimately, the work done with RSC will pave the way toward building technologies for the next major computing platform — the [metaverse](#), where AI-driven applications and products will play an important role.

Production

AI RSC

20x

faster than Meta's current V100-based clusters

Research

NVIDIA NCCL COLLECTIVES

9x

faster than Meta AI's V100-based research clusters

LARGE-SCALE NLP WORKFLOWS

3x

faster than Meta AI's V100-based research clusters

→ Share on Facebook

→ Share on Twitter

Our Work



RESEARCH

Facebook AI's Joelle Pineau receives Governor General's...

The award recognizes Canadian leaders for their groundbreaking innovations and positive impact on the quality of life in the country.

May 22, 2019

Artificial Intelligence

FACEBOOK

RESEARCH

Facebook Research at ICLR 2020

Facebook researchers will be participating in several activities at this year's virtual ICLR 2020.

April 27, 2020