NVIDIA pioneered accelerated computing to tackle challenges no one else can solve. We engineer technology for the da Vincis and Einsteins of our time. Our work in AI is transforming 100 trillion dollars worth of industries, from gaming to healthcare to transportation, and profoundly impacting society.
ACCELERATED COMPUTING ACROSS THE FULL-STACK AND AT DATA CENTER SCALE

NVIDIA is built like a computing stack or neural network—in four layers: hardware, system software, platform software, and applications. Each layer is open to computer makers, service providers, and developers to integrate into their offerings however best for them.
THE DEVELOPER CONFERENCE FOR THE ERA OF AI

NVIDIA GTC is more than an AI conference for developers. It’s a global experience that brings together thousands of brilliant innovators, researchers, creators, thought leaders, and decision-makers who are shaping our world with the power of AI, computer graphics, data science, and more.
NVIDIA WORKS WITH THOUSANDS OF CUSTOMERS AND MILLIONS OF DEVELOPERS

Scientists, researchers, developers, and creators are using NVIDIA to do amazing things. More than 3 million developers and 10,000 startups create thousands of applications for accelerated computing. We’ve shipped more than a billion CUDA®-based GPUs.
We invented the programmable shading GPUs 20 years ago, defining modern real-time computer graphics.

With NVIDIA RTX™, we have reinvented computer graphics, again. This new rendering approach fuses rasterization and programmable shading with ray tracing and AI to make PC games look much more beautiful and realistic—almost cinematic.
NVIDIA RTX RESETS GAMING

RTX is everywhere. More than 250 games and apps now use RTX to deliver stunning ray-traced graphics—including AAA blockbusters like Cyberpunk 2077, Fortnite, Minecraft, and more.
NVIDIA CLOUD GAMING—BRINGING RTX TO BILLIONS MORE

With the power of NVIDIA GeForce GPUs in the cloud, any gamer can stream titles from the top digital games stores. Over 12 million members now have instant access to more than 1,000 games on new devices and regions.
NVIDIA STUDIO—ACCELERATED COMPUTING PLATFORM FOR CREATORS

Our industry-leading GPUs, paired with our exclusive driver technology, and software, enhance creative apps with a level of performance and ability that is nothing short of inspiring. With NVIDIA Studio, creators are free to realize their most ambitious projects yet.
NVIDIA TURBOCHARGES SCIENCE

From weather forecasting and energy exploration, to computational fluid dynamics and life sciences, researchers are fusing traditional simulations and AI to solve the mysteries of the world around us.
NVIDIA HELPS VISUALIZE MICROSCOPY IMAGES OF LIVING CELLS IN REAL TIME

NVIDIA Clara Holoscan has made it possible to process and visualize streaming microscopy data in real time. Here we see how light sheet microscopy can automatically detect rare biological events instantly.
PHYSICISTS WIN NOBEL PRIZE FOR GPU-POWERED GRAVITY WAVE DETECTION

Thanks to an experiment powered in part by NVIDIA accelerated computing, three physicists won the Nobel Prize in physics for a breakthrough experiment that detected gravitational waves, a phenomenon Albert Einstein predicted more than a century ago.
WORLD RECORD-SETTING DNA SEQUENCING TECHNIQUE HELPS CLINICIANS RAPIDLY DIAGNOSE PATIENTS

Researchers using NVIDIA accelerated computing won the Guinness World Record for the fastest DNA sequencing technique, achieved in five hours and two minutes. The DNA sequencing record can allow clinicians to take a blood draw from a critical-care patient and reach a genetic disorder diagnosis the same day.
NVIDIA FUELS NEW AI APPROACH FOR DEVELOPING NEXT-GENERATION THERAPEUTICS

Built to support cross-disciplinary workflows, NVIDIA Clara™ Discovery combines the power of accelerated computing, AI, and machine learning to supercharge the entire drug development process.
NVIDIA POWERS AI FACTORIES

Data centers process mountains of continuous data to train and refine AI software. Companies are manufacturing intelligence, and their data centers are becoming giant AI factories. NVIDIA is becoming the new engine for the world’s AI infrastructure.
NVIDIA PROVIDES THE FULL STACK OF AI SOFTWARE

AI is the most powerful technology force the world has ever known. NVIDIA AI brings together skills like computer vision, conversational AI, recommender systems, AI avatars, robotics, and autonomous vehicles.

Top left: NVIDIA cuOpt for planning optimization for delivery services. Top right: Customer service assistant powered by NVIDIA Omniverse Avatar. Bottom left: NVIDIA RIVA brings discussions with "Toy Jensen" to life. Bottom right: NVIDIA Maxine transforms the online meeting experience.
HOPPER: THE NEW ENGINE OF THE WORLD’S AI INFRASTRUCTURE

The NVIDIA Hopper architecture will power the next wave of AI data centers. The first Hopper-based GPU, the NVIDIA H100, comes packed with 80 billion transistors, and delivers an order of magnitude performance leap over its predecessor.
NVIDIA DGX: PURPOSE-BUILT FOR THE UNIQUE DEMANDS OF AI

Our fourth-generation NVIDIA DGX™ system is the world’s first AI platform to be built with the new H100 GPUs. Each DGX H100 provides 32 petaflops of AI performance at FP8 precision—6x more than the prior generation. The next-generation DGX SuperPOD™ will expand the frontiers of AI with the ability to run massive workloads with trillions of parameters.
We designed Grace to process giant amounts of data. Grace will be the ideal CPU for AI factories. Grace Superchip has 144 CPU cores. And 1 terabyte per second of memory bandwidth—over 2-3x the top Gen 5 CPUs that have yet to even ship.
NVLink C2C offers multitude of system architectures

NVIDIA NVLink® will be coming to all future NVIDIA chips—CPUs, GPUs, DPUs, and SOCs. And NVLink is open for customers and partners to build custom processors. NVLink creates a new world of opportunities to build semi-custom chips and systems that leverage NVIDIA’s platforms and ecosystems.
THE BIG BANG OF OMNIVERSE

NVIDIA Omniverse™ is an easily extensible platform for 3D design collaboration and scalable multi-GPU, real-time, true-to-reality simulation. Omniverse revolutionizes the way we create and develop as individuals and work together as teams, bringing more creative possibilities and efficiency to 3D creators, developers, and enterprises.

Image courtesy of Amazon Warehouse
VIRTUAL WORLDS ARE ESSENTIAL FOR THE NEXT ERA OF AI
OMNIVERSE DELIVERS A NEW ERA OF 3D DESIGN COLLABORATION & WORLD SIMULATION

Enterprise customers currently host Omniverse on O VX computers in their data centers, or designers self-host on their RTX PCs and workstations. We expect Omniverse to reach every one of the tens of millions of designers, creators, roboticists, and AI researchers. With Omniverse Cloud, collaborators are connected in just a few clicks.
PEPSICO SIMULATES AND OPTIMIZES DISTRIBUTION CENTERS WITH NVIDIA OMNIVERSE

Our customers in robotics and industrial automation are realizing the importance of digital twins and are doing amazing things in Omniverse. PepsiCo is using Omniverse to develop digital twins of their distribution centers to improve efficiency and reduce energy consumption.

Image courtesy of PepsiCo
AMAZON ROBOTICS BUILDS DIGITAL TWINS OF WAREHOUSES WITH NVIDIA OMNIVERSE

Amazon has over 200 robotics facilities that handle millions of packages each day. Using Omniverse Enterprise and Isaac Sim™, Amazon Robotics is building AI-enabled digital twins of its warehouses to better optimize warehouse design and flow, and train more intelligent robotic solutions.

Image courtesy of Amazon Robotics
NVIDIA TO BUILD EARTH-2 SUPERCOMPUTER TO SEE OUR FUTURE

NVIDIA’s Earth-2 AI digital twin supercomputer will help predict climate change decades out. All the technologies NVIDIA has invented up to this moment are needed to make Earth-2 possible.
EVERYTHING THAT MOVES WILL BE AN AUTONOMOUS MACHINE

AI is enabling new applications that were previously considered science fiction—and impacting nearly every industry. Autonomous machines take advantage of AI to solve some of the world’s toughest problems.
NVIDIA ISAAC POWERS THE ROBOTICS REVOLUTION
Today’s robots can learn, adapt, and evolve using capabilities like machine learning, computer vision, navigation, and more.

NVIDIA-powered robots are everywhere, from manufacturing and agriculture to security and home-based healthcare.
AI is creating new possibilities in healthcare. A new generation of software-defined medical devices is enabling real-time sensing. Here we see Accuray, a radiation therapy company, using its AI-powered system to follow a tumor’s movement and deliver treatment options with sub-millimeter accuracy.

Image courtesy of Accuray
The NVIDIA DRIVE® family of products for autonomous vehicle development covers everything from the car to the data center.
NVIDIA DRIVE MAP ACCELERATES DEPLOYMENT OF AUTONOMOUS VEHICLES

NVIDIA DRIVE Map will provide survey-level ground truth mapping coverage to 500,000 kilometers of roadways in North America, Europe, and Asia by 2024. In NVIDIA DRIVE Sim™, features such as road elevation, road markings, islands, traffic signals, signs, and vertical posts are accurately replicated at centimeter-level accuracy.
MERCEDES-BENZ, NVIDIA PARTNER TO BUILD THE WORLD’S MOST ADVANCED, SOFTWARE-DEFINED VEHICLES

Starting in 2024, every next-generation Mercedes-Benz vehicle will include this first-of-its-kind software-defined computing architecture that includes the most powerful computer, system software, and applications for consumers, marking the turning point of traditional vehicles becoming high-performance, updateable computing devices.
NVIDIA POWERS THE AUTONOMOUS VEHICLE REVOLUTION

NEXT-GEN EV
- NIO
- R Auto
- PENG
- Li Auto
- Polestar
- IM 智己汽车
- Lotus

MAJOR AUTOMAKERS
- Mercedes
- Volvo
- Hyundai
- BYD
- SAIC

ROBOTAXIS
- Cruise
- Zoox
- DiDi
- Plus
- FAW

TRUCKING
- Volvo
- ud simple
- NAVISTAR
NVIDIA IS A LEARNING MACHINE

NVIDIA is united by a unique culture—the operating system of our company. We dream big, take risks, and learn from our mistakes together. Speed is the key to our success. Craftsmanship is a passion. There are no org charts—the project is the boss.

These beliefs inform everything we do, from designing amazing products to building one of the world’s great companies—a place where people can do their life’s work.
WE'RE ONE TEAM SOLVING THE WORLD'S GREATEST CHALLENGES

NVIDIA employees are dedicated to building technology that moves humanity forward and to supporting the communities in which they work and live.

We’ve been recognized as a top company in social responsibility, and our employees are passionate donors to hundreds of charities around the globe.
“Nothing makes me prouder than the incredible people who have made NVIDIA the company it is today. We want our company to be where they can do their life’s work, so it’s a true honor that we were ranked No. 1 on Glassdoor’s Best Places to Work list for large U.S. companies. Employees alone drive this ranking, and I am so grateful.

“Together, we continue to drive advances in AI, HPC, gaming, creative design, autonomous vehicles, and robotics—some of the world’s most impactful areas.

“I want to thank NVIDIA developers, partners, customers, and families for the amazing work you do. Exciting new frontiers lie ahead. Let’s seek them out together.”

Jensen