Our Body of Work

NVIDIA pioneered accelerated computing to tackle challenges no one else can solve. Our work in AI and the metaverse is profoundly impacting society and transforming the world's largest industries—from gaming to robotics, self-driving cars to life-saving healthcare, climate change to virtual worlds where we can all connect and create.
NVIDIA is built like a computing stack or neural network—in multiple layers: hardware, acceleration libraries, platform software, and applications. Each layer is open to computer makers, service providers, and developers to integrate into their offerings however best for them.
NVIDIA Works with Thousands of Customers and Millions of Developers

Scientists, researchers, developers, and creators are using NVIDIA to do amazing things. More than 3.5 million developers and 12,000 startups create thousands of applications for accelerated computing. And some 35,000 companies use NVIDIA AI technologies.
The Developer Conference for the Era of AI and the Metaverse

NVIDIA GTC is more than a 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 the future, from AI to the metaverse, from digital biology to digital twins, from autonomous vehicles to intelligent avatars.
NVIDIA Reinvents Modern Graphics

We invented the programmable shading GPUs nearly a quarter century 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 280 games and apps now use RTX to deliver stunning ray-traced graphics—including AAA blockbusters like Cyberpunk 2077, Fortnite, Minecraft, and more.
Ada Lovelace: A Quantum Leap

Ada, our latest generation RTX GPU architecture, is a breakthrough. Advances in core technologies deliver revolutionary performance and mark the tipping point for ray tracing and AI-based neural graphics.
NVIDIA Cloud Gaming—Bringing RTX to Billions

With the power of NVIDIA GeForce® GPUs in the cloud, GeForce NOW™ instantly transforms nearly any device into a powerful PC gaming machine. Any gamer can stream titles from the top digital game stores. Over 20 million members in 100+ countries now have access to more than 1,400 games.
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 next grand challenges.
Deciphering Code from the James Webb Space Telescope

Researchers at UC Santa Cruz are using AI and an NVIDIA-powered supercomputer to analyze images from the breakthrough telescope. Processing these images and learning from the data will enable scientists—and all of humanity—to see the universe as we’ve never seen it before.
World Record-Setting DNA Sequencing Technique Helps Clinicians Rapidly Diagnose Patients

Researchers at Stanford using NVIDIA accelerated computing won the Guinness World Record for the fastest DNA sequencing technique, achieved in five hours and two minutes. The method allows clinicians to take a blood draw from a critical-care patient and reach a genetic disorder diagnosis the same day.
AI Learns the Language of Biology and Chemistry to Accelerate Drug Discovery

The drug discovery space is practically infinite. Only about 50 drugs are approved each year, costing an average of a billion dollars to bring to market. AI’s ability to learn incredibly complex patterns and relationships has given researchers a powerful tool.

NVIDIA BioNeMo is a digital biology framework for researchers and developers to create large language models that can decipher the meaning of DNA, proteins, and chemicals, and explore the vast universe of drug discovery at lightspeed.
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 the engine of the world's AI infrastructure.
Hopper: A New Engine for 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.
Grace CPU Superchip—Tailor Made for the Largest Computing Problems

Designed 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.
Grace-Hopper Supercharges Recommender Systems

Recommenders run the digital economy. They are the engines behind social media, digital advertising, e-commerce, and search. Grace-Hopper, which combines an Arm-based Grace CPU with a Hopper GPU that communicate over NVIDIA NVLink-C2C®, will be a giant leap for recommender systems.
Large Language Models
Go Way Beyond Words

Large language models are the most important AI models today. The engines behind generative AI and the burgeoning text-to-image medium (example pictured), LLMs are also driving recommender systems, conversational AI, drug discovery, and possibilities not yet imagined.

NVIDIA Hopper, with its Transformer Engine, will make large language models accessible to everyone.

Image created by Midjourney based solely on the text input: “Artificial intelligence, Leonardo da Vinci drawing style”
Democratizing the Miracles of AI

AI is the most powerful technology force the world has ever known. The NVIDIA AI platform offers skills like computer vision, conversational AI, recommender systems, AI avatars, robotics, and accelerated genomic sequencing to the world’s enterprises.

Top left: NVIDIA cuOpt™ for planning optimization for delivery services. Top right: Clara™ Holoscan has made it possible to process and visualize streaming microscopy data in real time. Bottom left: NVIDIA Riva brings discussions with “Toy Jensen” to life. Bottom right: NVIDIA Maxine™ transforms the online meeting experience.
Foundations of the Metaverse

The metaverse, the 3D internet, promises a world where virtual collaboration is effortless and companies across every industry can unlock new levels of operational efficiencies and innovation with digital twin simulations.
NVIDIA Omniverse™—The Platform for Creating and Operating Metaverse Applications

Based on Universal Scene Description, Omniverse allows teams to build custom 3D pipelines and simulate persistent, large-scale virtual worlds.
Omniverse Cloud is an infrastructure-as-a-service that connects Omniverse applications running in the cloud, on prem, or on a device. Along with the NVIDIA Graphics Delivery Network, it enables individuals and enterprises to design, publish, and experience rich, interactive 3D internet applications from anywhere.
Amazon Robotics Builds Digital Twins of Warehouses in 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.
HEAVY.AI developed an application framework on Omniverse for telecommunications companies to build digital twins of their networks. This powerful application will allow them to combine multibillion-point lidar scans and satellite imagery with HEAVY.AI’s RF propagation models to simulate performance of radio networks in real time.
Deutsche Bahn Increases Capacity, Efficiency, and Sustainability with Omniverse

Digitale Schiene Deutschland, part of Deutsche Bahn German national railway, is using Omniverse to design, build, and operate a digital twin of 40,000 trains, 5,700 stations, and 33,000 km of track to maximize existing railway capacity and reduce its carbon footprint.
Lowe’s Uses Omniverse to Optimize Retail Operations and Enhance the Shopping Experience

With over 2,000 stores and 300,000 retail associates, Lowe’s is combining the amazing Magic Leap 2 headset and Omniverse so associates can enter a mixed physical-digital world to explore new store designs.
NVIDIA Is Building the Earth-2 Initiative to Accelerate Climate Research

Our Earth-2 initiative will be a digital twin of Earth. This simulation of the world will help predict the complex multi-physics of Earth’s atmosphere, land, sea, and ice caps at sufficiently high resolution. This will enable us to better predict the regional impacts of human actions over decades.
Deloitte, the world's largest professional services firm, and its 350,000 professionals are helping the world's enterprises use NVIDIA AI and Omniverse platforms to build modern multi-cloud applications for customer service, cybersecurity, industrial automation, warehouse and retail automation, and more.
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

From smart automation in manufacturing to last-mile delivery, robots are becoming more ubiquitous in everyday life. NVIDIA Isaac is our platform for accelerating and enhancing robotics—from development to simulation to deployment.
NVIDIA-powered robots are everywhere, from manufacturing and agriculture to security and home-based healthcare. Jetson is our robotics computer, with a million developers and used by some 6,000 companies, including 1,000 startups.
NVIDIA AI-Powered Medical Devices

AI-powered medical devices can help clinicians detect and measure anomalies, up-level surgical skills, enhance image quality, and optimize workflows. 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.
NVIDIA DRIVE®—Full Stack Autonomous Driving Platform

The NVIDIA DRIVE family of products for autonomous vehicle development covers everything from the car to the data center.
With NVIDIA DRIVE Sim™ features such as road elevation, road markings, islands, traffic signals, signs, and vertical posts are replicated at centimeter-level accuracy. Autonomous vehicles can drive millions of miles in a wide range of simulated scenarios so they hit the road running, safely. 

NVIDIA DRIVE Sim™ Turbocharges Developer Productivity to Get Self-Driving Cars on the Road
NVIDIA DRIVE Thor Unifies AV and Cockpit Functions on a Single Computer

Thor will power the centralized car computers of autonomous vehicles starting in 2025. Like Orin, Thor will be the processor for robotics, medical instruments, industrial automation, and edge AI systems.
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 Software-Defined Vehicle Revolution

Automakers
- Mercedes
- Jaguar
- Land Rover
- Volvo
- Hyundai
- Kia
- BYD
- Li Auto
- XPENG
- Lucid
- Lotus
- SAIC
- NIO
- ZEEKR

Robotaxis
- Cruise
- DiDi
- Pony.ai
- Zoox

Trucking
- FAW
- Navistar
- Desay SV
- G Plus
- TuSimple
- Quanta Computer

Tier 1s
- Bosch
- NAVISTAR
- DESAY SV
- Flex
- ZF
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
Tackling Challenges
No One Else Can Solve

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.
Founded in 1993
Jensen Huang, Founder & CEO
22,500 Employees
$26.9B in FY22

“Best Places to Work in 2022”
Glassdoor

“Most Innovative Companies”
Fast Company

“World’s Best Performing CEO”
Harvard Business Review

“World’s Best CEOs”
Barron’s

“100 Best Companies to Work For”
Fortune

“50 Smartest Companies”
MIT Tech Review

“100 Best Companies to Work For”
Fortune

“50 Smartest Companies”
MIT Tech Review
“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