Invent the Future with Us.

Your Future Starts Here

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 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.

Our work is truly unique. Part science. Part art. Completely rewarding. We take on challenges that make a significant difference in the world. Every breakthrough helps shape what comes next.

Find Your Perfect Fit

There are endless opportunities at NVIDIA, and you have the freedom to explore them all. It is all about landing where you are the most valued, challenged, and inspired in your work.

Below are general hiring areas for NVIDIA. Check out where your skills fit and search for your area of interest at **www.nvidia.com/university**.

Hardware	
ASIC Design	> Familiar with digital systems, VLSI design, computer architecture, computer arithmetic, CMOS transistors, and circuits **Programming Skills:** Verilog/VHDL, C/C++, Perl
Verification	> Experience or relevant coursework in GPU or processor verification/validation > Experience or relevant coursework with directed/random functional testing including writing test plans and directed/random diagnostics > Experience or relevant coursework developing software infrastructure for validation of architecture **Programming Skills:** Verilog, C/C++/UVM, Perl
Physical Design	> Understanding of Synthesis, static timing analysis, clock/power distribution and analysis, RC extraction and correlation, place and route, and circuit design and analysis > Tools: ICC2, Design Compiler, PrimeTime from Synopsys and First Encounter, Innovus, Virtuso from Cadence **Programming Skills:** Perl, C, C++, TCL, Scheme, Python, SKILL and Make
Architecture	
Computer Architecture	> Knowledge and coursework in computer architecture, and one or more of focused areas (computer graphics, deep learning, ray tracing, parallel programming, memory architecture, and high-performance computing systems) > Passion for learning/developing functional and performance simulators > Understanding workload/architecture interactions, and analyzing RTL and silicon behavior > Experience in one or more of these following fields: PC/workstation/console graphics, hardware/software development, HPC (MPI, OpenMP), robotics, self-driving cars, rendering, or computer vision **Programming Skills:** C++, scripting languages (Python, Perl), modern graphics APIs (DirectX, OpenGL, Vulkan), modern GPGPU APIs (CUDA, OpenCL), revision control (Perforce, Git)
Software	
Compiler	> Compiler development, compiler test experience, or coursework > Knowledge of open source projects like CLANG, LLVM, or gcc > Knowledge of high-performance computing > Experience in testing production software or test automation > Experience with deep learning compilers, e.g. XLA, TVM, Halide **Programming Skills:** C++, C, CUDA, Python

Systems Software	> Familiarity with operating system concepts (threads, process control, memory/ resource management, virtual memory, etc.) > Experience writing and debugging multithreaded programs > Familiarity with computer system architecture and microprocessor fundamentals (caches, buses, memory controllers, DMA, etc.) > Experience with kernel development (Linux, QNX, or Windows) or RTOS development on embedded platforms > Knowledge of data structures and algorithm time/space complexity **Programming Skills:** C, C++
Graphics Systems Software	> Excellent math skills and theory knowledge > Familiarity with 3D/2D graphics theory, implementation, and optimizations > Simulation or emulation experience – writing and debugging tests > Knowledge of computer architecture (e.g.: x86, ARM CPUs, GPUs) > Experience in device drivers, operating systems, real-time systems, game console middleware, or other low-level library development > Very strong problem solving and debugging skills **Programming Skills:** C, C++, Direct3D, Vulkan, OpenGL, OpenCL, CUDA
Software Cloud	> Experience with development of high-quality and highly distributed cloud-based RESTful web services > Experience with cloud infrastructure, cloud-scale software, CI/CD, and automation/scripting skills > Understanding of cloud design in the areas of virtualization/global infrastructure, distributed systems, load balancing, and security > Data and performance analysis tools, debugging skills, and system virtualization skills > Experience with kernel development for Linux, Android, Chrome, or Windows > Knowledge of Kubernetes and Docker **Programming Skills**: C++, Java
Software Security	> Harden and develop secure solutions across our software stack— > spanning multi-node supercomputers down to microcontrollers and security co-processors > Build tools and infrastructure to scale security efforts across large organizations and codebases with millions of lines of code > Knowledge of operating and system software, secure design principles, with understanding of common vulnerability and mitigation patterns > Exposure to security methods like static/dynamic analysis, fuzzing, negative testing, and design analysis such as threat modeling or attack trees > Experience with trusted computing or formal verification technologies and tools, e.g. SPARK, Frama-C **Programming Skills:** C, C++, SPARK, Frama-C, Scripting languages (Python, Bash), Fuzzing tools (AFL, libFuzzer), Data processing (Kibana, Grafana), CI/CD (Jenkins)

Software Tools Infrastructure	A software team that enables architects to build the next generation of amazing hardware. **GPU Development Tools** > Model, analyze, and debug the development of next-generation GPU hardware and drive performance improvements **Programming Skills:** OOP, C++, Python, Perl and/or Graphics & GPGPU APIs (Vulkan, DirectX, OpenGL, CUDA, OpenCL) **Chip Design, Validation, and Workflow Tools** > Develop software to enable the design and validation of NVIDIA's next generation of chips to support the hardware design lifecycle **Programming Skills:** C++, Python, Unix shell, CS theory (e.g. graphs, compiler design, operating systems, distributed systems, micro-services architecture, logic synthesis, or simulation) **Metrics, Process Management, and Compute Infrastructure** > Work on distributed/scalable application and system designs to enable NVIDIA's chip design process **Programming Skills:** Scripting languages (Python, Go, Javascript), data processing (ElasticSearch, Kibana, Grafana, MongoDB), Java, Gitlab, Jenkins
Artificial Intelligence	
Deep Learning Applications and Algorithms	> Solid knowledge of deep neural networks with experience in developing deep learning frameworks such as PyTorch and TensorFlow > Understanding of mathematical fundamentals (linear algebra/numerical methods) and/or computer vision areas > Solid foundations of software design, computer memory model (disk, memory, caches), CPU and GPU architectures, networking, and numeric libraries > Experience in design and development of embedded systems, drivers, and real-time software **Programming Skills:** Python, C, C++, CUDA **NVIDIA Projects:** **Riva** (Conversational AI), **Metropolis** (Smart Cities), **Clara** (Medical Imaging), and more
Autonomous Vehicles	> Experience with training frameworks (Tensorflow, Keras, or Pytorch) > Background in one or more of the following: computer vision, mapping/localization, SLAM, sensor input devices (LiDAR, cameras, radars), image processing/segmentation **Programming Skills:** C/C++, Python, CUDA **NVIDIA Projects:** **DRIVE**

Robotics	> Experience working with autonomous vehicles or robotics stack > Experience with simulators, designing and building validation frameworks for machine learning/deep learning, and working with cloud technologies > Good operating systems and data structure knowledge (threads, processes, memory, and synchronization) > ROS, physics simulation software, computer graphics, version control, and computer vision **Programming Skills:** C/C++, Python, CUDA, OpenGL **NVIDIA Projects:** **Isaac SDK**, **Isaac Sim**, **Omniverse**, **Jetson AGX Xavier**
Deep Learning Frameworks and Libraries	> Building underlying frameworks and libraries that accelerate deep learning on GPUs > Experience with performance-oriented parallel programming, optimizing for high-performance computing, or algorithms/numerical methods fundamentals > Experience with one or more of the following: Docker containers, computer architecture, large complex codebases **Programming Skills:** Python, C, C++, CUDA **NVIDIA Projects:** **Deep Learning Frameworks**, **TensorRT**, **cuDNN**
Research	
Research	> PhD candidacy in CS, CE, EE, mathematics, physics, signal processing, statistics, neuroscience, or equivalent research experience in those fields > Track record of research excellence with a strong publication record > Familiarity with deep learning frameworks such as PyTorch or TensorFlow > Knowledge of applications areas such as parallel algorithms, parallel programming systems, computer vision, robotics, NLP, or recommender systems **Programming Skills:** Python, MATLAB, C, C++, CUDA Check out research areas **here**
Applied Research	> Deep learning: theory and applications to NLP, computer vision, graphics, speech, reinforcement learning, or another domain > Experience with deep learning frameworks such as PyTorch or Tensorflow **Programming Skills:** Python and C/C++

Technical Sales	
Solutions Architect	This is a rotational program where New College Graduates will spend 18 months rotating quarterly through customer-facing teams supporting different industries such as hyperscale cloud service providers, automotive, retail, healthcare, and finance. > Graduating with a BS or MS degree in a related technical field, or an advanced degree/MBA program > Knowledge of software and hardware business models > Analytical, marketing, and project management skills > Familiarity with deep learning frameworks such as PyTorch or TensorFlow > Excellent communication and presentation skills **Programming Skills:** C, C++, Python, CUDA
Business/Operations	
We have roles in product management, marketing, finance, and operations across multiple teams at NVIDIA. Whether you are pursuing a BS, MS, or PhD in a related field OR currently enrolled in an MBA program, we are looking for diverse talent to come make an impact in these roles.	

What We Do

Autonomous Machines	Gaming and Entertainment
Cloud and Data Center	Healthcare
Deep Learning and Artificial Intelligence	High-Performance Computing
Design and Pro Visualization	Self-Driving Cars

Where We Work

- Austin, TX
- Bethesda, MD
- Boulder, CO
- Champaign, IL
- Durham, NC
- Hillsboro, OR
- Holmdel, NJ
- New York, NY
- Pittsburgh, PA
- Redmond, WA
- Santa Clara, CA
- Seattle, WA
- Toronto, Canada
- Westford, MA

A Truly Inclusive Culture

Everyone is welcome. Every background offers a new perspective that can only help us grow smarter and better.

Everyone has a voice. Great ideas drive us, no matter who or where they come from.

Early Talent Programs

Internships

Whether you're pursuing a BS, MS, PhD, or MBA, we have year-round internships available—for a minimum of 12 weeks—with great benefits.

NVIDIA Intern, Ignite, and MBA programs make this a great place to kickstart your journey and take part in meaningful work making an impact on the next generation of innovation. You'll make a difference on real projects, connect with the greatest minds in our industry, and build lifelong connections.

New College Graduate (NCG)

Our NCG program, gives you the opportunity to influence areas ranging from high-performance computing and graphics to edge computing, networking, and autonomous machines. We provide great benefits that include ESPP, tuition reimbursement, continuous learning and development programs, paid time off, and more.

How to Apply

1. **Explore University Opportunities.** Check out our general hiring areas above to see where your skills and interests may fit. Search for your area of interest at **www.nvidia.com/university** and submit a resume!
2. **Get Noticed.** Make sure your resume aligns with the area you're interested in. For our technical and engineering opportunities, our teams like to see your technical and programming skills through past internships, relevant coursework, and cool projects.
3. **Stay Connected.** Once your resume has been submitted, we have a dedicated team to review profiles who can help match your skills to areas of interest and/or direct openings.

   We have new roles opening through-out the season. If there's a fit, our recruiting team will reach out with next steps.

   In the meantime, follow us on **LinkedIn**, **Instagram** and **NVIDIA Blog** to stay connected!

For more, visit **www.nvidia.com/university**