

Invent the Future with Us.

Your Future Starts Here

NVIDIA pioneered accelerated computing to tackle challenges no one else can solve. Our work in AI and digital twins is transforming the world's largest industries and profoundly impacting society — from gaming to robotics, selfdriving cars to life-saving healthcare, climate change to virtual worlds where we can all connect and create.

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** Digital Systems, Digital Design, VLSI Design or Real-Time Logic (RTL) Design Computer Architecture, Computer Arithmetic, Object-Oriented Programming, CMOS Transistors, Circuits Programming Skills & Technologies: Verilog, SystemVerilog, VHDL, Perl, TCL, C, C++, Linux Verification Formal Verification, GPU or processor Verification or Validation Digital Systems, Digital Design, VLSI Design or Real-Time Logic (RTL) Design Random functional testing, writing test plans, directed/ random diagnostics CPU Architecture, Computer Architecture, Software Infrastructure (for validation of architecture) Programming Skills & Technologies: Verilog, SystemVerilog, VHDL, UVM, Python, Perl, TCL, C, C++, Linux Physical Design/VLSI Synthesis, Static Timing Analysis, Clock/Power Distribution and Analysis, RC Extraction and Correlation, Place and Route, Circuit Design > VLSI, Computer Architecture, Digital/Micro Electronics, Mixed-Signal Design, Digital Design, Logic Design > CAD and Physical Design Methodologies (flow and tools development), as well as implementation Chip Floor Plan, Power/Clock Distribution, Chip Assembly and P&R, Timing Closure, Power and Noise Analysis, and Back-End Verification Programming Skills & Technologies: Perl, C, C++, TCL, Linux, Scheme, Python, SKILL, Make, ICC2, Design Compiler, PrimeTime (Synopsys, First Encounter), Innovus, Virtuso (Cadence) **Architecture Computer Architecture** Computer Architecture experience in one or more of these focus areas: Computer Graphics, Deep Learning, Ray Tracing, Parallel Programming, Memory Architecture, or High-Performance Computing Systems Digital Systems, VLSI Design, Computer Architecture (GPU or CPU Architecture), Computer Arithmetic, CMOS Transistors and Circuits Programming Skills & Technologies: Verilog, SystemVerilog, VHDL, Linux, C, C++, Perl **Deep Learning Computer Architecture** Computer Architecture experience in one or more of these focus areas: GPU Architecture, CPU Architecture, Deep Learning, GPU Computing, Parallel Programming, or High-Performance Computing Systems > GPU Computing (CUDA, OpenCL, OpenACC), Deep Learning Frameworks (PyTorch, TensorFlow, Caffe), HPC (MPI, OpenMP) > Deep Learning, Modelling/Performance Analysis, Parallel Programming

Programming Skills & Technologies: C, C++, Python, Perl, CUDA,

OpenCL, PyTorch, TensorFlow, TensorRT, Linux

Systems Software

System Software	 Operating Systems (Threads, Process Control, Memory/Resource Management, Virtual Memory)
	 Multithreaded Debugging, Linux Kernel Development, RTOS Development on Embedded Platforms, Data Structures & Algorithm time/space complexity
	Programming Skills & Technologies: C, C++, Linux
Graphics Systems Software	 Computer Architecture, Operating Systems, Real-Time Systems Developmen Device Driver Programming, Game Console Middleware, or other Low-Level Library Development Building Cloud and On-Premise Infrastructure for backend analytics
	 3D/2D Graphics Theory, Implementation & Optimizations, Simulation or Emulation experience (writing & debugging tests)
	Programming Skills & Technologies: C, C++, CUDA, x86, ARM CPU, GPU, Linux, Direct3D, Vulkan, OpenGL, OpenCL
Compiler	 Compiler Development, Open Source Programming, High-Performance Computing (HPC)
	Programming Skills & Technologies: C, C++, CUDA, Linux, Open Source Tools (CLANG, LLBM, gcc), Testing Production/Automation Tools (XLA, TVM, Halide
Firmware & Embedded Software	> Operating Systems (Threads, Process Control, Memory/Resource Management, Virtual Memory), Embedded Systems Software Development
	 Data Structures & Algorithms, Computer Architecture, Computer Systems Software, Linux Kernel Development, Multi-Threaded or Multi-Process Programming, RTOS Development on Embedded Platforms
	Programming Skills & Technologies: C, C++, CUDA, Perl, Bash/Shell Scripting, Linux
Software Security	 Operating Systems, Data Structures & Algorithms, Cybersecurity, Cryptography, Computer Systems Architecture, Microcontroller and Microprocessor fundamentals (Caches, Buses, Memory Controllers, DMA, etc.)
	Programming Skills & Technologies: C, C++, Spark, Frama-C, Python, Bash/Shell Scripting, Linux, Formal Verification Tools (Spark, Frama-C), Automated Security Testing & Fuzzing Tools (AFL, libFuzzer), Data Processing (Kibana, Grafana), CI/CD (Jenkins)

Software

Development Tools	 Linear Algebra & Numerical Methods, Operating Systems (memory/resource management), Scheduling and Process Control, Hardware Virtualization
	Programming Skills & Technologies: Java, Python, Testing Methodologies (Jenkins), GUI Technologies (AngularJS, Web Services, SOAP/REST), Relational Databases (MySQL, NoSQL, Elastic Search, MongoDB, HBase), Systems Administration (Windows, Linux)
Cloud	> Distributed Systems, Data Structures & Algorithms, Virtualization, Automation/Scripting, Container & Cluster Management, Debugging
	Programming Skills & Technologies: Java, Go, C++, SPARK, RAPIDS, REST API, CI/CD, Container Tools (Docker/Containers, Kubernetes), Infrastructure Platforms (AWS, Azure, GCP)
Tools Infrastructure	> Operating Systems, Distributed Systems, Micro-Services Architecture, Logic, Simulation
	 GPU Development - modeling, analyzing, and debugging GPU hardware for performance
	 Chip Design, Validation, and Workflow - software design and validation for chips to support hardware
	 Metrics, Process Management, and Compute Infrastructure - distributed/scalable applications to enable the chip design process
	Programming Skills & Technologies: Java, JavaScript, Unix/Shell Scripting, Graphics & GPU APIs (Vulkan, DirectX, OpenGL, CUDA, OpenCL), Data Processing Tools (ElasticSearch, Kibana, Grafana, MongoDB), CI/CD (Jenkins), C++, CUDA, OOP, Go, Python, GitLab, Linux
Data Science	> Data Science, Data Engineering, Open Source Data Science Tools, Open Source Libraries
	> Building Cloud and On-Premise Infrastructure for back-end analytics
	Programming Skills & Technologies: Python, C, C++, Data Technologies (Kafka, ELK, Cassandra, Apache Spark)

Artificial Intelligence and Deep Learning

Autonomous Vehicles		Computer Vision, Mapping, Localization, SLAM, Image Processing, Segmentation				
		Programming Skills & Technologies: C, C++, CUDA, Python, Linux, Sensor Input Devices (LiDAR, cameras, radars), Training Frameworks (TensorFlow, Keras, PyTorch)				
		NVIDIA Projects: DRIVE				
Deep Learning Applications & Algorithms		Deep Neural Networks, Linear Algebra, Numerical Methods and/or Computer Vision, Software Design, Computer Memory (Disk, Memory, Caches), CPU and GPU Architectures, Networking, Numeric Libraries, Embedded System Design and Development, Drivers, Real-Time Software				
		Programming Skills & Technologies: C, C++, CUDA, Python, Linux, Deep Learning Frameworks (PyTorch, TensorFlow)				
		NVIDIA Projects: <u>Riva</u> (Conversational AI), <u>Metropolis</u> (Smart Cities), <u>Clara</u> (Medical Imaging), and more				
Deep Learning Frameworks & Libraries		Computer Architecture (CPUs, GPUs, FPGAs or other accelerators), GPU Programming Models, Performance-Oriented Parallel Programming, Optimizing for High-Performance Computing (HPC), Algorithms, Numerical Methods				
	>	Building underlying frameworks and libraries that accelerate Deep Learning on GPUs				
		Programming Skills & Technologies: C, C++, CUDA, TensorRT, Python, Linux, Docker Containers, CPU, GPU, FPGA				
		NVIDIA Projects: <u>Deep Learning Frameworks</u> , <u>TensorRT</u> , <u>cuDNN</u>				
Robotics		Robotics, Autonomous Vehicles, Validation Frameworks for Machine Learning/Deep Learning, Operating Systems and Data Structures (threads, processes, memory, synchronization), Physics Simulation, Simulators, Computer Graphics, Version Control, Computer Vision, Cloud Technologies				
		Programming Skills & Technologies: C, C++, CUDA, ROS, Python, OpenGL, Linux				
		NVIDIA Projects: Isaac SDK, Isaac Sim, Omniverse, Jetson AGX Xavier				
Machine Learning		Machine Learning, Deep Learning, Accelerated Computing, GPU Computing, Deep Learning Frameworks, NVIDIA RAPIDS				
		Programming Skills & Technologies: C, C++, PyTorch, TensorFlow, TensorRT, Linux				

Research

Research (PhD Required)	 PhD candidacy in CE, EE, CS, Mathematics, Physics, Signal Processing, Statistics, Neuroscience, or equivalent research experience in those fiel 			
	> Track record of research excellence with a strong publication record			
	 Research Application Areas: Parallel Algorithms, Parallel Programming Systems, Computer Vision, Robotics, Natural Language Processing (NLP), or Recommender Systems 			
	Programming Skills & Technologies: C, C++, CUDA, Linux, PyTorch, TensorFlow, Python, MATLAB			
	Check out Research Application Areas here			
Applied Research (BS, MS, PhD)	 Applied Research Areas: Deep Learning Theory and Applications to Natural Language Processing (NLP), Computer Vision, Graphics, Speech, Reinforcement Learning, or another relevant domain 			
	Programming Skills & Technologies: C, C++, PyTorch, TensorFlow, Python, Linux			
Business Operations				
Business Operations (MBA)	 Product Management, Marketing, Finance, and Operations across multiple teams 			

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	>	Durham, NC	>	Redmond, WA	>	Toronto, Canada
>	Bethesda, MD	>	Hillsboro, OR	>	Santa Clara, CA		
>	Boulder, CO	>	Holmdel, NJ	>	Seattle, WA		
>	Champaign, IL	>	New York, NY	>	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, working side by side with some of the industry's brightest minds, and gain hands-on experience with never-before-seen technologies and developments.

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.
- 4. We have new roles opening through-out the season. If there's a fit, our recruiting team will reach out with next steps.
- 5. In the meantime, follow us on LinkedIn, Instagram and NVIDIA Blog to stay connected!

