

Training Notification Form, IIT Delhi

Company Overview

Name:	NVIDIA
Website:	www.nvidia.com
Company Type:	Information Technology
Description:	Since its founding in 1993, NVIDIA (NASDAQ: NVDA) has been a pioneer in accelerated computing. The company's invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics, ignited the era of modern AI and is fueling the creation of the metaverse. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry.

Project Details

Designation:	2 months Summer Internship (May - Jul 2024)
Type:	Information Technology
Location:	Bengaluru
Project Details:	<p>HARDWARE INTERNJDGPU ARCHITECTURE TEAMGPU architecture team is engaged in the development of industry leading high performance and power efficient GPUs. Specific areas include architecture modeling, analysis and performance verification. The team works on GPUs across all application domains such as gaming for PC and mobile devices, professional graphics & visualization and high-performance computation. Skills you will use/develop: • C++ modeling, test development • RTL design, debug • ASIC design & verification tools, methodologies • Computer architecture, Graphics, GPU micro-architecture, parallel computing • Performance evaluation, analysis and debug • Perl/Python scripting Areas you will be working on: COMPUTER ARCHITECTURE; MEMORY SYSTEMS ARCHITECTURE, COMPILER ARCHITECTURE/ PERFORMANCE MODELING GPU ASIC DESIGN / VERIFICATION TEAM Today NVIDIA's GPUs simulate human intelligence, running deep learning algorithms and acting as the brain of supercomputers, robots, and self-driving cars that can perceive and understand the world We are seeking a passionate, innovative, and highly motivated senior verification engineer to join us in the development of the next generation of PCI Express controllers used in NVIDIA's GPUs and SOCs In this position, you will be responsible for verification of the ASIC design, architecture and micro architecture using advanced verification methodologies You are expected to understand the design and implementation, define the verification scope, develop the verification infrastructure and verify the correctness of the design You will be working with architects, designers, pre and post silicon verification teams to accomplish your tasks What you'll be doing • Develop test plans, tests and verification infrastructure for PCIe at IP/sub system/SOC level • Create verification environment using UVM methodology • Create reusable bus functional models, monitors, checkers and scoreboards • Drive functional coverage driven verification closure • Work with architects, designers and post silicon teams Ways to stand out from the crowd • Good knowledge of PCIe protocol Gen 3 and above • Good debugging and problem-solving skills • Good communication skills and ability desire to work as a team player</p> <p>TEGRA SOC DESIGN & VERIFICATION Tegra ASIC team (Design Verification) As a</p>

As a Hardware Engineer at NVIDIA you will design and implement the industry's leading Graphics, Video and Mobile Communications Processors. Specific areas include 2D and 3D graphics, mpeg, video, audio, network protocols, high-speed IO interfaces and bus protocols, and memory subsystem design. You will be responsible for Architecture and micro-architecture design of the ASICs, RTL design and synthesis, Logic and Timing verification using leading edge CAD tools and Semiconductor process technologies. Areas you will be working on:

- ASIC, RTL, DESIGN AND VERIFICATION OF PROCESSORS
- Low Power verification
- Power Estimation and Modeling
- PCIe Design verification
- Functional / Formal verification

CPU VERIFICATION TEAM As a design and verification/validation engineer in the ARM CPU team, you will be working on the next generation of 64bit ARM CPUs and SOC's. As part of this assignment the intern will get a chance to learn about computer architecture at a very granular level, System Verilog, Design Verification, SOC Verification, Verification methodologies and C/C++ programming. The intern also will get an opportunity to get familiar with industry standard tools in verification and validation. During the course of the internship, the intern will contribute to building test benches, developing architectural simulators, modifying random instruction generators and creating stimulus for verification and validation of different units of the CPU and SOC. Areas you will be working on:

- Computer Architecture
- Digital Design and Programming in C/C++/Perl
- ARM, CPU Design and Verification/ Validation

POST SILICON VALIDATION TEAM As a post silicon validation engineer you would be working on cutting technologies in post silicon validation, thermal validation, silicon characterization, board bring-up and would be playing with oscilloscopes in the lab. Areas you will be working on:

- Post Silicon Validation

Stipend Details

Stipend:	75,000 INR Per Month
Accommodation:	Yes
Travel Expenses:	Yes

Selection Process

Resume Shortlist:	Yes
Written Test:	No
Online Test:	Yes
Group Discussion:	No
Personal Interview:	Yes
No. of Offers:	4

Eligibility

**Diversity
Recruiting:** No

**Eligible
Years:** Graduating in 2025 (Pre-Final Year Students) - B.Tech / Dual / Master's

**Eligible
Departments:** B.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering, B.Tech in Electrical Engineering (Power and Automation), B.Tech in Mathematics & Computing, B.Tech and M.Tech in Computer Science & Engineering, B.Tech and M.Tech in Mathematics & Computing