



## #FindingHopper

Do you have a passion for computing using new age technologies?

Do you want to work on leading-edge problems alongside some of the best & brightest in the world?

Do you like working in a dynamic working environment that involves creative problem solving and thinking on your feet?



We, at **NVIDIA**, want to find and bring the brightest women young technologists of our generation to do their life's best work at **NVIDIA**.

The initiative is a hands-on 8-week programme for extraordinary young women to meet and learn from the industry best minds, receive network and mentorship opportunities, professional development -- all designed to inspire and set young women on a path to a promising career in tech.

The program is open to young women/students with a strong academic record, who will begin their third year of a full-time undergraduate or fourth year of a dual degree program in **CS, EE, ECE or EEE**, with a passion for technology

We have opportunities in various teams internally and a brief about the teams and their requirements is given below:

## GPU ARCHITECTURE TEAM

GPU 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

**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 super computers, 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.

**You will be working on:**

- 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

## TEGRA SOC DESIGN & VERIFICATION

Tegra ASIC team (Design Verification)

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

**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 verification engineer in the Nvidia's CPU team, you will be working on the next generation of 64bit ARM architecture-based 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, Unit/Cluster /SOC Verification, cutting edge verification methodologies and C/C++/ASM 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.

**You will be working on**

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