

Intern Requirement

No. of students required	1
Preferred Discipline	<ul style="list-style-type: none">• Computer Engineering• Computer Science• Electrical Engineering
Prerequisites/ Skills Required	<ul style="list-style-type: none">• Knowledge in C/C++ programming• Self-motivated and willing to work independently

Project Details

Title	Exploring Graphic Processing Unit for Deep Packet Inspection
Overview/Background	High-speed deep packet inspection (DPI) is usually achieved by parallel processing of traffic flows. Scaling up DPI performance via general multiple-core processors can be a rather expensive approach. Low cost and high performance hardware like graphic processor unit (i.e. built with massive compute cores) therefore presents an attractive candidate for DPI application.
Objectives/Scope/ Deliverables	<ul style="list-style-type: none">• Make use of a GPU compiler (CUDA) to compile and load a pattern matching software into the GPU.• Benchmark the DPI performance of the graphic processor against the Intel multi-core processor on an industrial server.
Project Duration	6 months