

Intern Requirement

No. of students required	1
Preferred Discipline	<ul style="list-style-type: none">• Computer Engineering or Computer Science
Prerequisites/ Skills Required	<ul style="list-style-type: none">• Computer Architecture, C programming

Project Details

Title	Benchmarking Integer Operations
Overview/Background	<p>In benchmarking, the same program is run on different processors so as to compare their relative performance. The performance of a processor depends not only on its clock speed, but also in the design of its architecture. Benchmarking is important as it allows informed decisions to be made before the adoption and purchase of a system.</p> <p>However, most available benchmarking tools are mainly based on floating point operations. The results obtained from using such tools may not be an accurate representation for applications that mainly uses integer operations. We are therefore interested in investigating a suitable benchmark for such applications.</p>
Objectives/Scope/ Deliverables	<ul style="list-style-type: none">• Understand benchmarking, survey existing options and have brief understanding of Intel and AMD processors architecture.• Research on suitability of existing options with respect to applications that focus on integer operations.• Design a suitable benchmark for use in such operations.
Project Duration	2-4 months