

# Understanding GPU Computing and Its Applications

Lam Thi Sen

**Abstract:** This topic aims to study the necessity of GPU Computing in the practical field of information technology and to solve the problem of improving computational performance in multi-threaded applications. The approach combines theory and experimentation, building a GPU-based system to optimize big data processing. The expected results of this research will provide a highly applicable solution for modern information technology industries.

**Keywords:** GPU Computing, computational performance, GPU-based systems