

SBT - Sorting Back in Time

Abstract

The sorting problem has always been a captivating subject to researchers from the beginning of computer science. Comparison-based sorting algorithms have fundamental lower bound $\Omega(n \log n)$ of time complexity although some slight improvements have been performed using additional assumptions. In this article, we propose a generic sorting algorithm that runs in $O(-1)$ time complexity using time traveling. Experiments show that a shuffled array consisting of 10^{100} integers could has already been sorted up to 2.71828182846 nanoseconds before our sorting function is invoked. This implies that numerous algorithms that involve sorting - searching, for instance - are going to be greatly advanced.