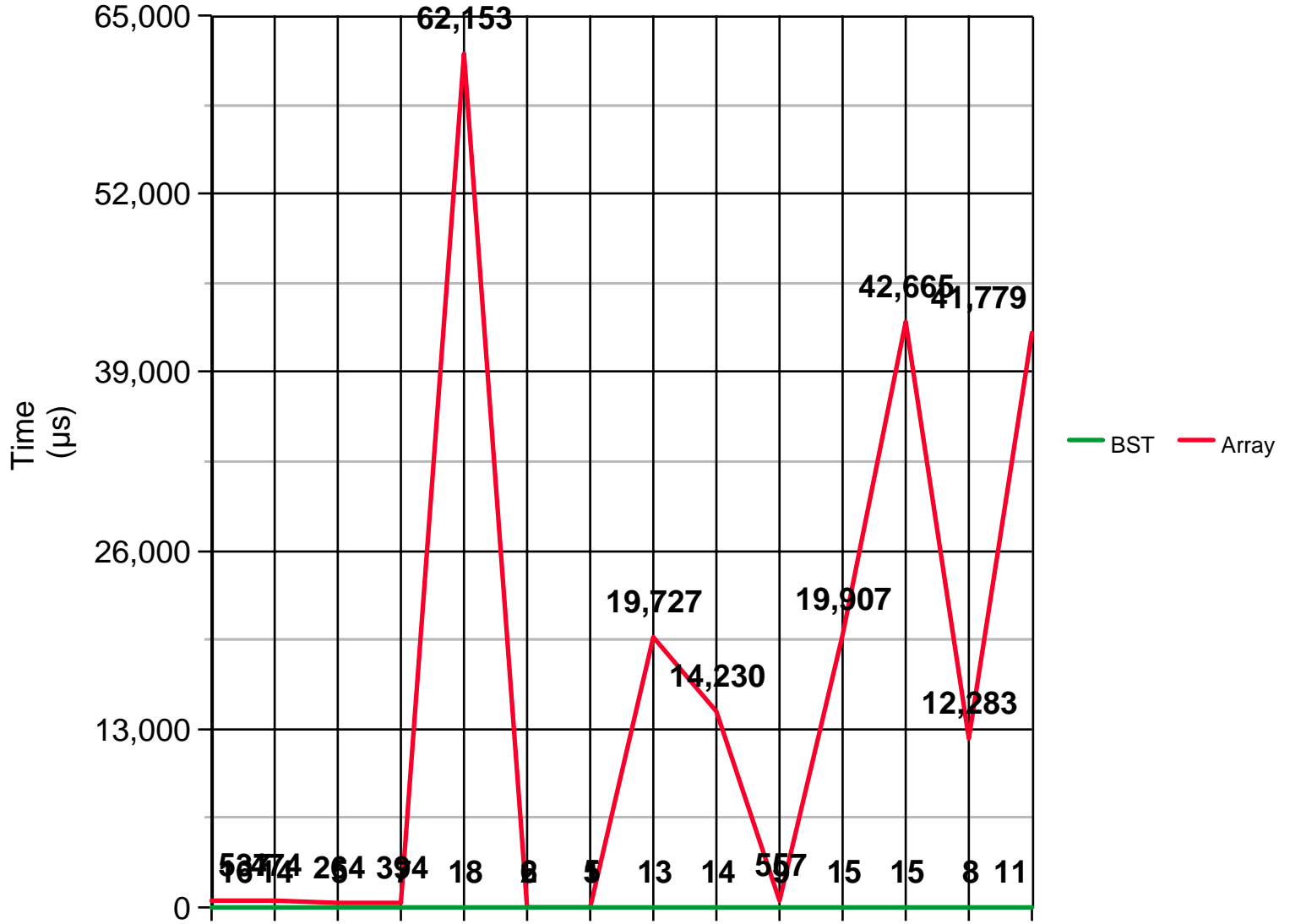


BST vs Array Computing Time



To initialize, the binary search tree took about twice as long as the array ($\sim 4.06\text{s}$ to $\sim 1.74\text{s}$), but after the data structure was set up, the BST structure performed consistently better than the array. The BST had search times from $5\text{-}18\mu\text{s}$, where the array had wildly varying search times of $1\text{-}62,153\mu\text{s}$.

The only time the array structure performed better was when the value to search was very near the beginning of the array – within the first 50 or so indexes. Overall, the BST is a much better structure when working with large data sets, and an array is a better solution when working with a small data set.