Largest Subarray

Joseph Watts

February 12, 2019

Abstract

1 Background and Related Work

1.1 Brute Force Algorithm

Algorithm 1 Insertion Sort

```
function InsertionSort(L)
    for i 1..len(L) do
        j ← i
        while j > 0 and L[j] < L[j − 1] do swap(L[j], L[j-1])
            j ← j − 1
        end while
    end for
end function
```

Explain the function here:

Summation Equation goes here

Explain runtime complexity:

1.2 Kadane Algorithm

Algorithm 2 Merge Sort

```
function MergeSort(L)
    if len(L) <= 1 then
        return L
    end if
    A ←MergeSort(first half of L)
    B ←MergeSort(second half of L)

    return Merge(A,B)
end function
```

Explain Kadane Here

Gimme big O calculation pls

Explain big O and big Θ here

2 Experimental Setup

RUST HAS BIG PP OWO

This is how we timed our setup

3 Results

Include our graph visualization of our data here. Brute Force and Kadane Timing

4 Conclusions