DP. Let $f[i]$ denote the number of trees with the root being $A[i]$. $O(n^2)$.

Accepted Solutions Runtime Distribution
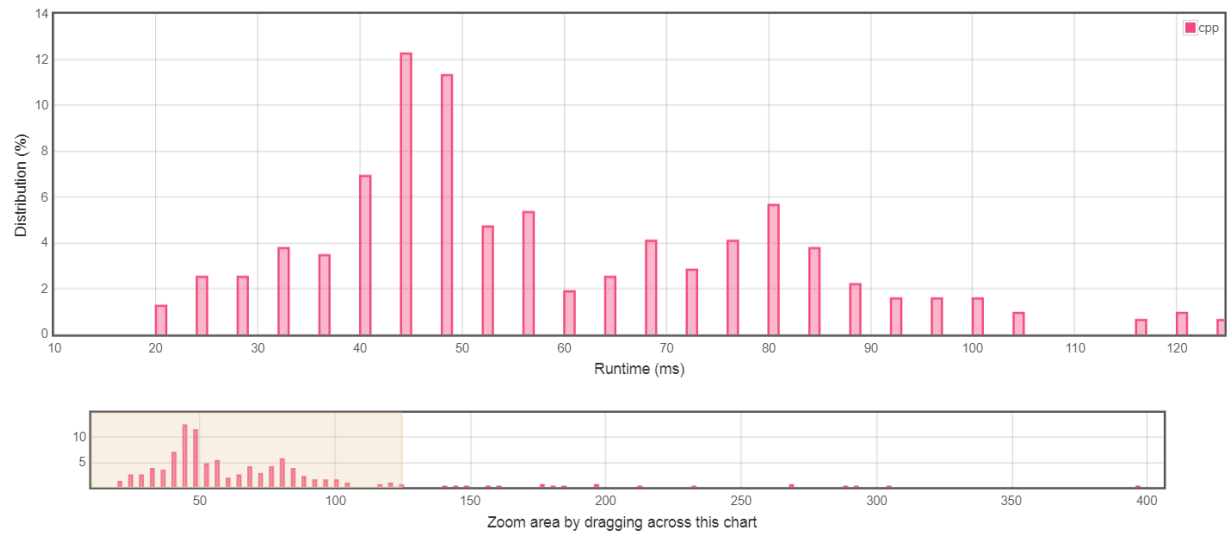
References