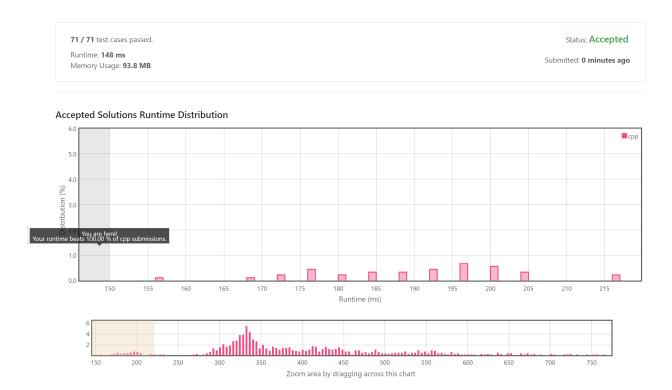
- 1. persistent array.  $O(n \log \log n)$  [1].
- 2. random access list. expected  $O(\log i)$ , where i is the index [2].



## References

- [1] Paul F Dietz. Fully persistent arrays. In Workshop on Algorithms and Data Structures, pages 67–74. Springer, 1989.
- [2] Chris Okasaki. Purely functional random-access lists. In *Proceedings of the seventh international conference on Functional programming languages and computer architecture*, pages 86–95, 1995.