This paper presents an overview and comprehensive survey of Residue Number System (RNS) and Bioinformatics. It focuses on application of RNS to Smith-Waterman Algorithm (SWA), highlights how the inherent attributes of RNS can be applied to improve performance of SWA in the analysis of Deoxyribonucleic Acid (DNA) and also observes the two principal methods of data conversion and lastly, we suggest the direction for future research.

References

Residue Number System: An Important Application in Bioinformatics

6(2):174-179, 2011


Index Terms

Computer Science  Algorithms

Keywords

Residue Number System, Smith-Waterman Algorithm, Deoxyribonucleic Acid, Bioinformatics.