

CSE 300: Online Assignment

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1 Introduction

This assignment has been designed to assess the preparation of the students in writing scientific articles using \LaTeX . This assignment covers a variety of components that are commonly used in scientific manuscripts.

1.1 Figures

We intend to put Figure 1 at the top of a page.

1.2 Tables

We wish to place Table 1 right here.

Table 1: Optimization scores for Method-1 and Method-2 on different datasets covering various model conditions. We show average scores of two optimization criteria for various model conditions.

Dataset	Model condition	Optimization Score 1		Optimization Score 2	
		Method-1	Method-2	Method-1	Method-2
D1	M1	7,425.55	770.00	929.55	10
	M2	7,657.00	9,179.00	716.15	20
	M3	54.00	9,007.15	3,759.00	30
	M4	74.00	5567.15	99.00	25
D2	M1	34.00	273.00	321.60	34
	M2	357.00	79.60	16.00	11
	M3	657.00	179.60	716.00	19

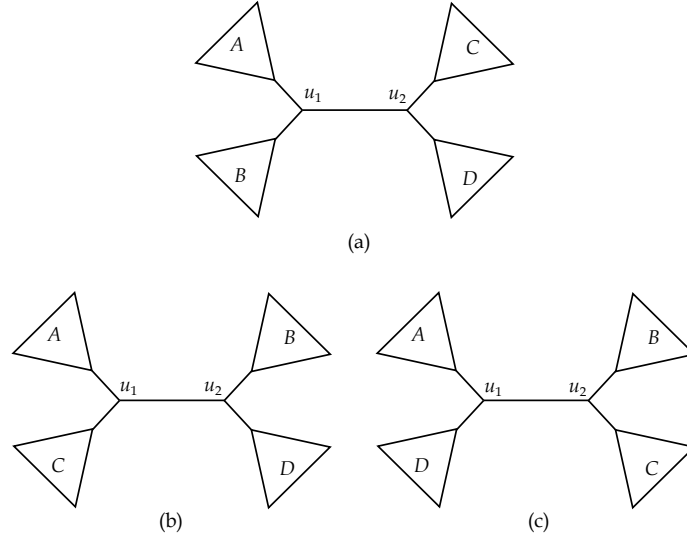


Figure 1: **Nearest Neighbor Interchange (NNI) move on an internal edge.** (a) A species tree ST , and (b)-(c) the neighbors of ST resulting from one NNI move on edge $e = (u_1; u_2)$. A, B, C and D are the sets of taxa in the four subtrees around edge e .

1.3 Equations

Let $n_1|n_2|n_3$ be a tripartition defined on an internal node u of a binary tree T . The number of tripartitions mapped to u is given by Eqn. 1.

$$N(n_1, n_2, n_3) = \binom{n_1}{2} \binom{n_2}{1} \binom{n_3}{1} + \binom{n_2}{2} \binom{n_1}{1} \binom{n_3}{1} + \binom{n_3}{2} \binom{n_1}{1} \binom{n_2}{1} \quad (1)$$

2 Conclusion

The major objectives of this assignment are listed below (please do not ignore the font sizes).

1. To assess the ability of the students in preparing manuscripts in \LaTeX .
2. To see if the students have adequately practiced different aspects of writing in \LaTeX .
3. To see if the students can add various basic components (e.g., tables, figures, equations) to a \LaTeX manuscript

4. To see if the students can leverage the available materials (both offline and online) to do something which has not explicitly been taught in the class.