Dissertation Title

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I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institute of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given.

Enrico Siragusa
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bp	base pair, character of the alphabet $\{\mathtt{A},\mathtt{C},\mathtt{G},\mathtt{T}\}$	??
Mb	megabase, 1 million base pairs or characters	??
MB	megabyte, 1 MB = 1024 kB = 1,048,576 byte	??
GB	gigabyte, 1 GB = 1024 MB	??
Σ, Ψ, Φ	finite alphabets	??
Σ^*	set of all possible strings over the alphabet Σ	??
Σ^n	set of all possible strings over the alphabet Σ with length n	??
ϵ	empty string	??
$\lvert s \rvert$	length of string s	??
$s[i]$	character of s at position i (counting from 0)	??
$s_i, \mathrm{suf}(s,i)$	suffix of s beginning at position i	??
$[i..j]$	set of integers $i, i+1, \ldots, j$	??
$[i..j)$	set of integers $i, i+1, \ldots, j-1$	??
$\mathbb{N}_0$	set of non-negative integers	??
$\prec, \preceq$	strict and non-strict substring relation	??
$\langle \ldots \mid \ldots \rangle$	definition of a string analogous to the set notation	??
$\mathrm{lcp}\, \mathcal{S}$	longest common prefix of a set $\mathcal{S}$ of strings	??
$<_{\mathrm{lex}}$	lexicographical order	??
$<_q$	lexicographical prefix order, compares only prefixes of length q	??
$\mathtt{\$}, \mathtt{\$}^j$	(virtual) sentinel characters to well-define the suffix tree	??
$concat(v)$	edge label concatenation on the path from root to suffix tree node v	??
$\overline{s}$	suffix tree node whose edge label concatenation is s	??
$\mathrm{rank}(a)$	rank of character a in the underlying alphabet	??
$\mathtt{R}, \mathtt{D}, \mathtt{I}$	edit operations that replace, delete, or insert a character	??
$\lVert T \rVert_{\mathrm{E}}$	number of edit operations in transcript T	??
$\lVert T \rVert_{\mathrm{R}}$	number of matches, replacements, and deletions in transcript T	??
$\mathcal{R}$	sequenced reads, set of strings	??
G	reference sequence, string	??
$\mathcal{D}$	database, set of strings	??
$\mathrm{freq}(\phi, \mathcal{D})$	absolute number of strings in $\mathcal{D}$ that contain ϕ at least once	??
$\mathrm{supp}(\phi, \mathcal{D})$	relative number of strings in $\mathcal{D}$ that contain ϕ at least once	??