

Work #1

A. J. Pinho and D. Pratas

IEETA/DETI,
University of Aveiro, Portugal
`ap@ua.pt` , `pratas@ua.pt`

Group 1

- Bruno Nunes
- Catarina Marques
- David Raposo
- Gonçalo Machado

Group 2

- Pedro Rasinhas
- Guilherme Antunes
- Gonalo Silva

Group 3

- Mariana Andrade
- Vicente Barros
- Filipe Silveira

Group 4

- Ricardo Antunes
- Pompeu Costa
- Rafael Pinto

Group 5

- Tiago Costa
- João Rodrigues
- João Mourão

Group 6

- Renan Ferreira
- João Reis
- Gonçalo Marques

Group 7

- Diogo Magalhães
- Leonardo Almeida
- Pedro Rodrigues

Group 8

- Rafael Gonçalves
- João Fonseca
- Diogo Paiva

Group 9

- Inês Baptista
- Daniel Ferreira
- João Correia

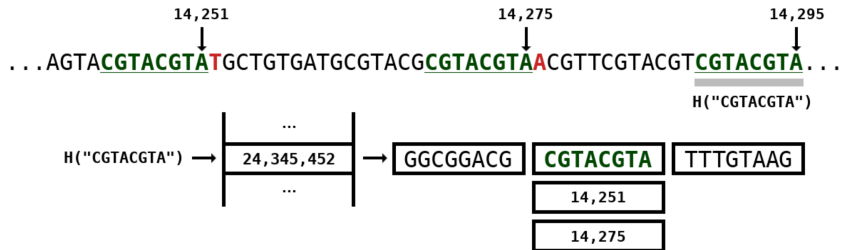
Group 10

- Daniel Ferreira
- Bruna Simões
- Tiago Carvalho

Grupo 11

- Ana Paradinha
- Paulo Pinto
- João Matos
- Filipe Antão

Copy Models Example



Algorithm

Stop Repeat Model

If there are active repeat model and $n\text{Hits} / n\text{Tries} < \text{Threshold}$: (exception at begin)
Stop and use fallback model;

If kmer exists in hash table:

Start Repeat Model
Position = position in hash;
nHits = 0;
nTries = 0;

Predict

$\text{Predicted_symbol}[\text{symbol}] = (n\text{Hits} + \alpha) / (n\text{Tries} + 2 * \alpha)$;
 $\text{comp_prob} = (1 - \text{Predicted_symbol}[\text{symbol}]) / 3$;
 $\text{bits} = -\text{Log_2}(P[\text{symbol}])$;
total += bits;

Update

Add Kmer Position to hash table;
move sliding window
Position++;