Binning dictionary D

| 0 | 0 | 0 | 0 | 0 | ... | 1 | 1 | 0 | 1 | 0 | 1 | ... | 0 | 0 | 0 | 0 | 0 | 0 | ... | 1 | 0 | 0 | 0 | ... |

Pattern p

A C G G A C G A ... A C C A G

sub − bitvectors of D for kmers of pattern p

A C G G A $D(k_1)$ | 0 | 0 | 0 | 0 | 1 | ... | 1 |

C G G A C $D(k_2)$ | 1 | 0 | 1 | 0 | 1 | ... | 1 |

G G A C G $D(k_3)$ | 1 | 1 | 1 | 1 | 0 | ... | 0 |

... | ... |

A C C A G $D(k_u)$ | 1 | 0 | 0 | 0 | 1 | ... | 0 |

$Count(P)$ | 5 | 2 | 4 | 0 | 3 | ... | 3 |

potential bins for pattern p (threshold = 4)   ✓   ✓