

Math for DHADVTKV

July 1, 2019

1 2PC

$$\begin{aligned} bestTT &= \frac{\#P(H + 16)}{bandwidth} + s + l + \frac{\#P(H + 1064)}{bandwidth} + \#P * s + l \\ &+ \frac{\#P(H + 1080)}{bandwidth} + s + l + \frac{\#P(H + 9)}{bandwidth} + \#P * s + l \\ &+ \frac{\#P(H + 33)}{bandwidth} + s + l + \frac{\#P(H)}{bandwidth} + \#P * s + l \\ &= 6l + 3s(\#P + 1) + \frac{6 * \#P * H + 2202 * \#P}{bandwidth} \end{aligned} \tag{1}$$

$$\begin{aligned} avgUsedBandwidth &= \#P(H + 16) + \#P(H + 1064) \\ &+ \#P(H + 1080) + \#P(H + 9) \\ &+ \#P(H + 33) + \#P(H) \\ &= 6 * \#P * H + 2202 * \#P \end{aligned} \tag{2}$$

2 TSB

$$\begin{aligned} bestTT &= \frac{\#P(H + 16)}{bandwidth} + s + l + \frac{\#P(H + 1064)}{bandwidth} + \#P * s + l \\ &+ \frac{\#P(H + 1092)}{bandwidth} + s + l + \frac{\#P(H + 57 * batchSize)}{bandwidth} + \#P * s + l \\ &+ \frac{H + 17}{bandwidth} + s + l + \frac{\#P(H + 25 * batchSize)}{bandwidth} + s + l \\ &= 6l + 2s(2 + \#P) + \frac{H(1 + 5 * \#P) + \#P(2172 + 82 * batchSize) + 17}{bandwidth} \end{aligned} \tag{3}$$

$$\begin{aligned}
avgUsedBandwidth &= \#P(H + 16) + \#P(H + 1064) \\
&\quad + \#P(H + 1092) + \#P(H/batchSize + 57) \\
&\quad + H + 17 + \#P(H/batchSize + 25) \\
&= \#P * H(3 + 2/batchSize) + 2254 * \#P + H + 17
\end{aligned} \tag{4}$$