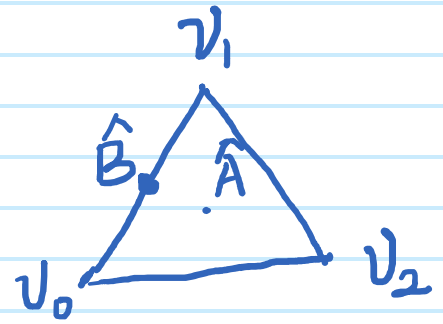


\hat{A}, \hat{B} forms an edge

$B \prec A, \Rightarrow B$ is a face of A



$$\Rightarrow \text{dist}(B, A) < \max_i (\text{dist}(A, v_i))$$

$$\text{also } \text{dist}(A, v_i) = \left| \frac{1}{k+1} (v_0 + \dots + v_k) - v_i \right|$$
$$= \left| \frac{1}{k+1} (v_0 - v_i) + \dots + \frac{1}{k+1} (v_k - v_i) \right|$$

One of them is zero

$$\leq \frac{k}{k+1} \max_j (v_j - v_i)$$

$$\leq \frac{k}{k+1} \mu(A) \leq \frac{n}{n+1} \mu(k)$$