seed set $S$ for disease $D$

$n$ random seed sets generated by conserving degree distribution of $S$

candidate gene $v$

$\alpha(v, D)$

$\alpha^{(1)}$

$\alpha^{(2)}$

$\alpha^{(n)}$

mean of distribution

$\mu_S = \frac{\sum_{1 \leq i \leq n} \alpha^{(i)}}{n}$

std. deviation of distribution

$\sigma^2_S = \frac{\sum_{1 \leq i \leq n} (\alpha^{(i)} - \mu_S)(\alpha^{(i)} - \mu_S)^T}{n-1}$

Adjusted score:

$\alpha_{SD}(v, D) = \frac{(\alpha(v, D) - \mu_S)}{\sigma_S}$