seed set $S$ for disease $D$

$\alpha(v, D)$

candidate gene $v$

$\mathcal{M}(v)$

$n$ random genes with similar degree to $v$

mean of distribution

$\mu(v) = \sum_{u \in \mathcal{M}(v)} \alpha(u) / |\mathcal{M}(v)|$

std. deviation of distribution

$\sigma^2(v) = \sum_{u \in \mathcal{M}(v)} (\alpha_S(u) - \mu(v)) / (|\mathcal{M}(v)| - 1)$

Adjusted score:

$\alpha_{CD}(v, D) = (\alpha_S(v, D) - \mu(v)) / \sigma(v)$