Should we accept the best split?

Should we accept the best split?



$$t = \frac{\mu_1 - \mu_2}{\sigma_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

t statistic for t test

$$\sigma_p = \sqrt{\frac{(n_1 - 1)\sigma_1^2 + (n_2 - 1)\sigma_2^2}{n_1 + n_2 - 2}}$$

pooled variance