

One variable

Categorical
1 population
 χ^2 goodness of fit test

$$T = \sum_i \frac{(O_i - E_i)^2}{E_i}$$

$\sim \chi^2_{\underbrace{k-1-q}_{l_{\#}}}$
parameters needed to estimate

⊗ k populations
but still one categorical variable

χ^2 homogeneity
Fisher's Exact test
Monte Carlo sim.

⊗ Numeric

⊗ 1 sample t-test

$$H_0: \mu = 100 (\mu_c)$$

$$T = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}$$

$\sim t_{n-1}$

~~⊗ Sign test~~
~~low power~~

⊗ Wilcoxon signed rank test

* symmetric distribution

Two variables

Two Categorical

one categorical + one Numeric

↑
i.e. differences

Test for independence

- χ^2 test
- Fisher's exact
- Monte Carlo

paired t-test

2-sample t-test

Wilcoxon Rank Sum test.



ANOVA

One numeric
by multiple
factors

- Regression



