

# Inferential Statistics

1. Our confidence depends on 2 things : Size of the Sample , Variance of the Sample

As the variance grows . We need larger samples to have the same degree of Confidence

2. Law of Large Numbers & Gambler's Fallacy

3. Regression to the Mean : this is true

4. Empirical Rule : 68% , 95% , 99.7%

assumption: mean estimation error is zero  
distribution of est. errors is normal

5. Normal distribution : specified by mean & sd  
occurs a lot in life !

digression: SciPy library , `scipy.integrate.quad`  
used to integrate functions