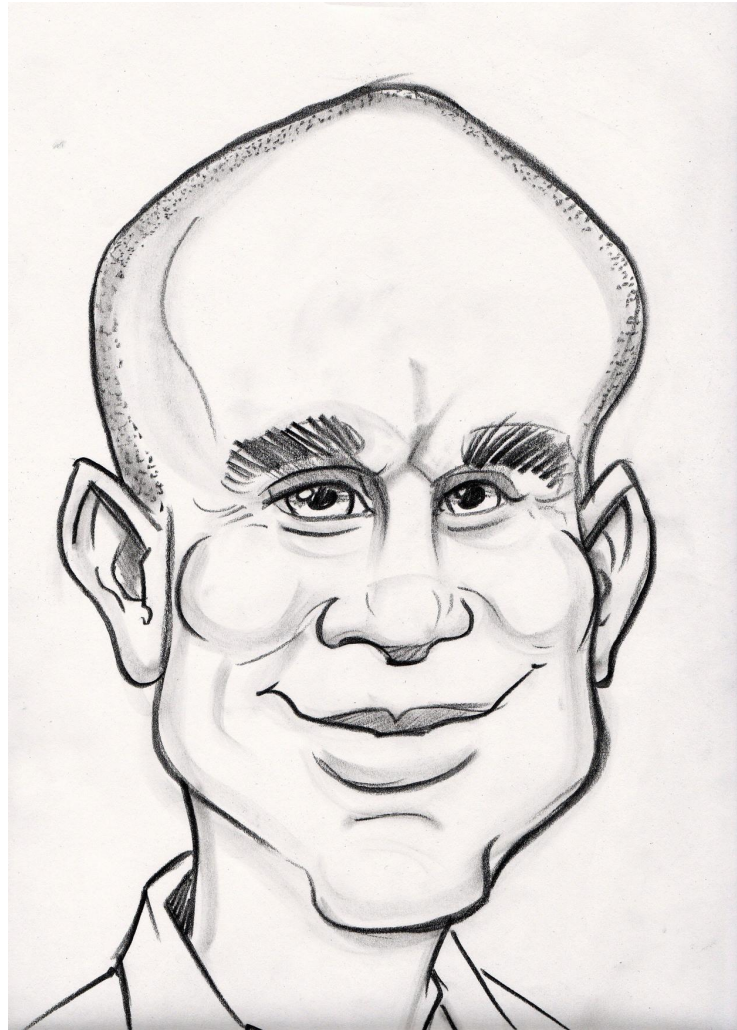


Simulations

For the Mathematically
Challenged

**Miki
Tebeka**



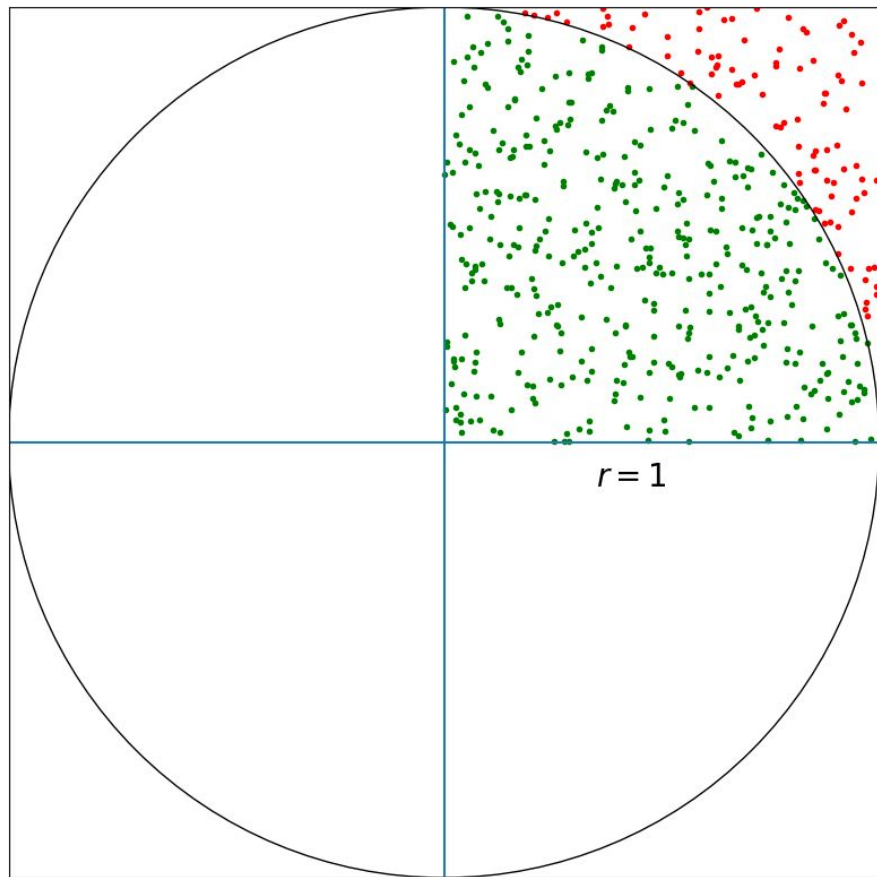
**CEO, CTO,
UFO, ...
353solutions**

If you can write a
for-loop, you can do
statistics.

Jake Vanderplas



π





The test of a disease presents a rate of **5% false positives**. The disease strikes **1/1000 of the population**. People are tested at random, regardless of whether they are suspected of having the disease. **A patient's test is positive.** **What is the probability of the patient being stricken with the disease?**

| | Predicted Sick | Predicted Healthy |
|----------------|----------------|-------------------|
| Actual Sick | True Positive | False Negative |
| Actual Healthy | False Positive | True Negative |



More?

Statistics for Hackers

- Jake Vanderplas

Monte Carlo Simulation

- Wikipedia

SimPy

- Discrete Simulation

Thanks!

