

Thoughts on Random Number Generators - Simulation

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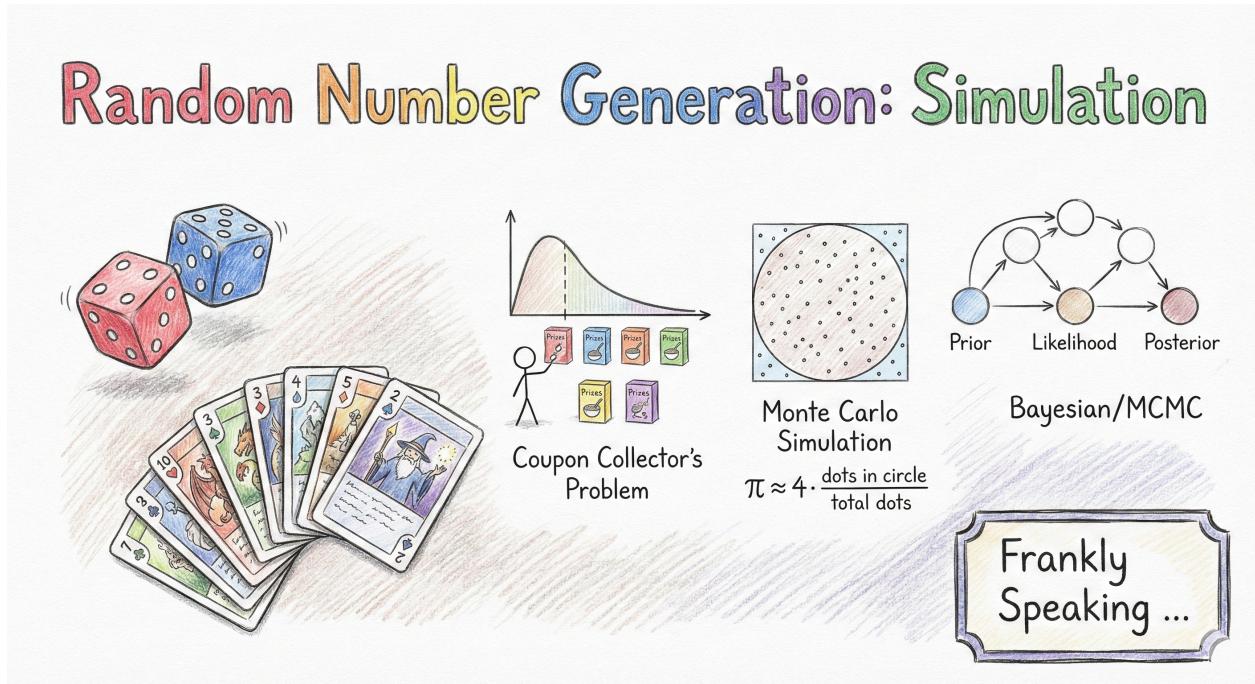


Figure 1: Thoughts on Random Number Generators - Simulation

Introduction

Reviewing: Simulation for Data Science with R by Matthias Templ

Why simulation?

Statistical simulation is a numerical method for conducting experiments in order to solve mathematical problems in data-driven manner. Each experiment

1. draws a random outcome from the data
2. apply an estimation function on that data

Random draws are made using random number generators.

Statistical simulation is also used to show the properties of an estimation method regarding different conditions. One example is the question of how an estimator behaves under different kinds of missing values pattern, or how outliers may corrupt the estimator.

Gatling - for randomise values used in performance tests see https://gatling.io/docs/current/advanced_tutorial/?highlight=rand

References

- Demo Data as Code by Thomas A. Limoncelli (ACM)
- Wikipedia: Simulation
- Simulation for Data Science with R by Matthias Templ