

Random variables and their distributions, Some important distributions: the binomial distribution, Poisson distribution, The normal or Gaussian distribution, The central limit theorem, Monte Carlo Methods: the need for random numbers, Random numbers-uniformly distributed, the middle square method, the linear congruential sequence, Random numbers-not uniformly distributed, Special methods: Interpolation in a table, inverse transformation, the acceptance-rejection method, methods for the normal distribution, method for the binomial distribution, method for the Poisson distribution. Example of Monte Carlo generation.