



Module PMRF-ISSS066/V/2025

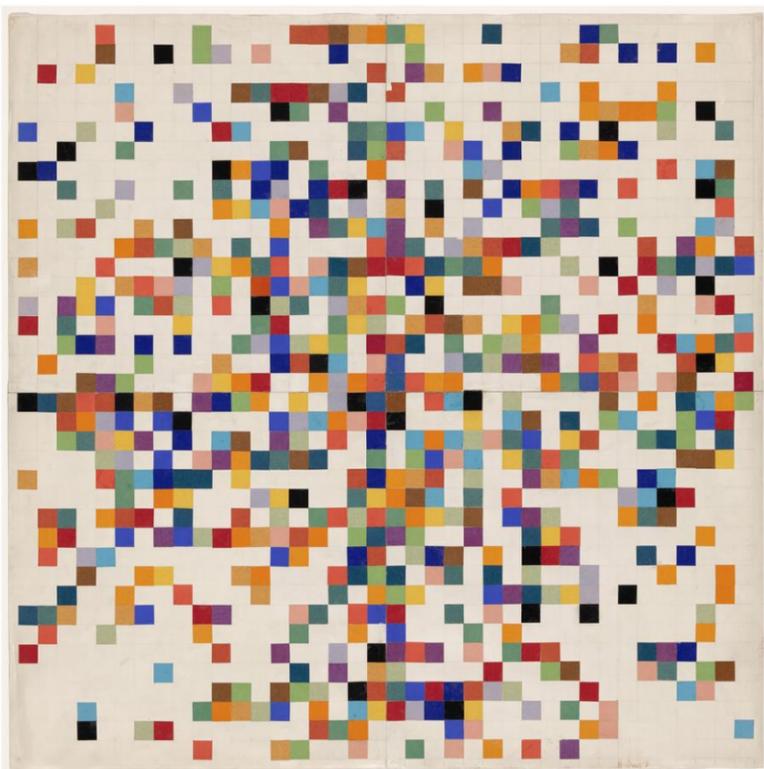
Monte Carlo Methods

Name of the PMRF student

Nishanth Shetty

Required background of the students taught

UG/PG engineering/science students
with a background in probability



Spectrum Colors Arranged by Chance II
by Ellsworth Kelly

Details of the content of the module

- Introduction
- Transformation and Accept/Reject Sampling methods
- Monte Carlo Integration and Importance Sampling
- Metropolis Hastings
- Gibbs Sampling
- Langevin Monte Carlo
- Annealing Strategies
- Hamiltonian Monte Carlo
- Sequential Monte Carlo
- Variational Inference and Expectation Maximization

Schedule of the module

Start Date: 2 August 2025

End Date: 2 November 2025

Recorded lectures will be made available every
Saturday and Sunday

Total lecture hours: 35

Meeting link : Will be shared later

Contact email ID: issforum@gmail.com

Registration link: [Google Form](#)

