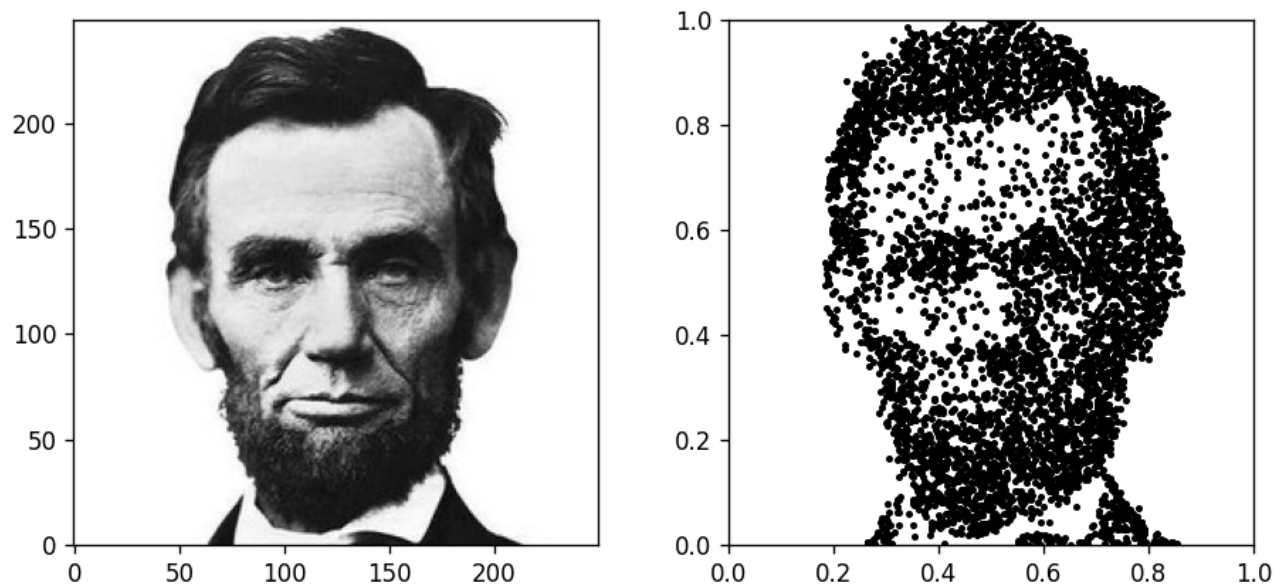


## HOMEWORK-3

### Question 1

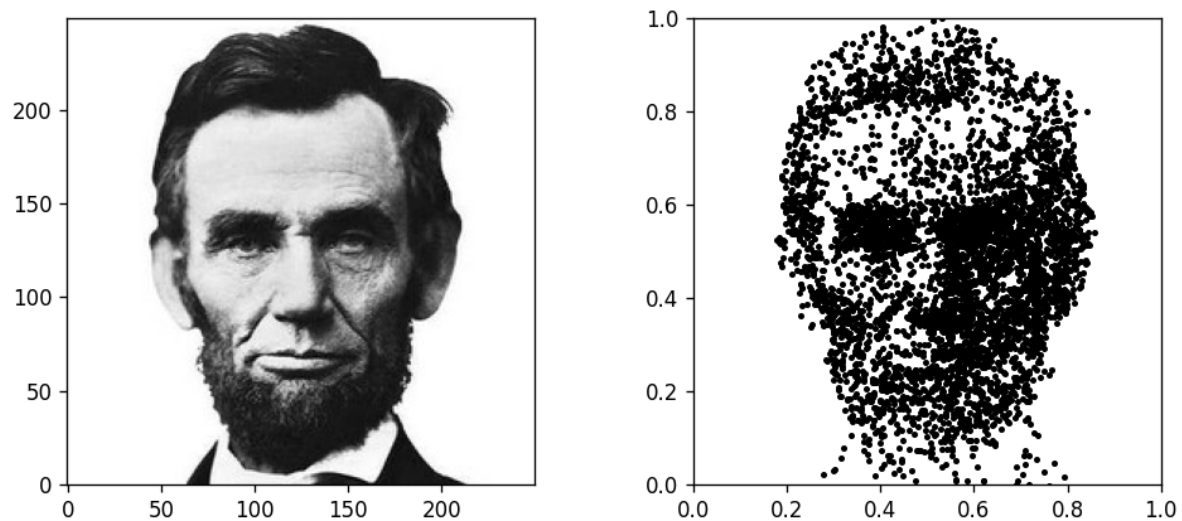
- Rejection Uniform Sampling

Rejection Sampling with Uniform Proposal Distribution



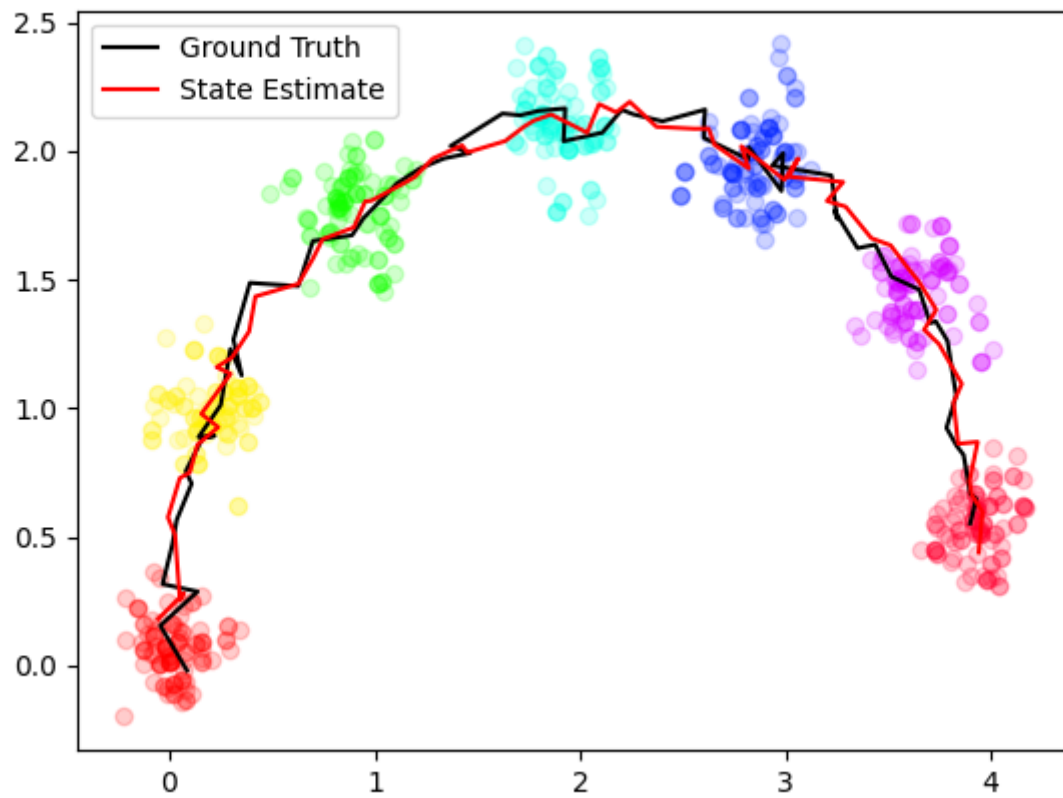
- Rejection Normal Sampling

Rejection Sampling with Gaussian Proposal Distribution



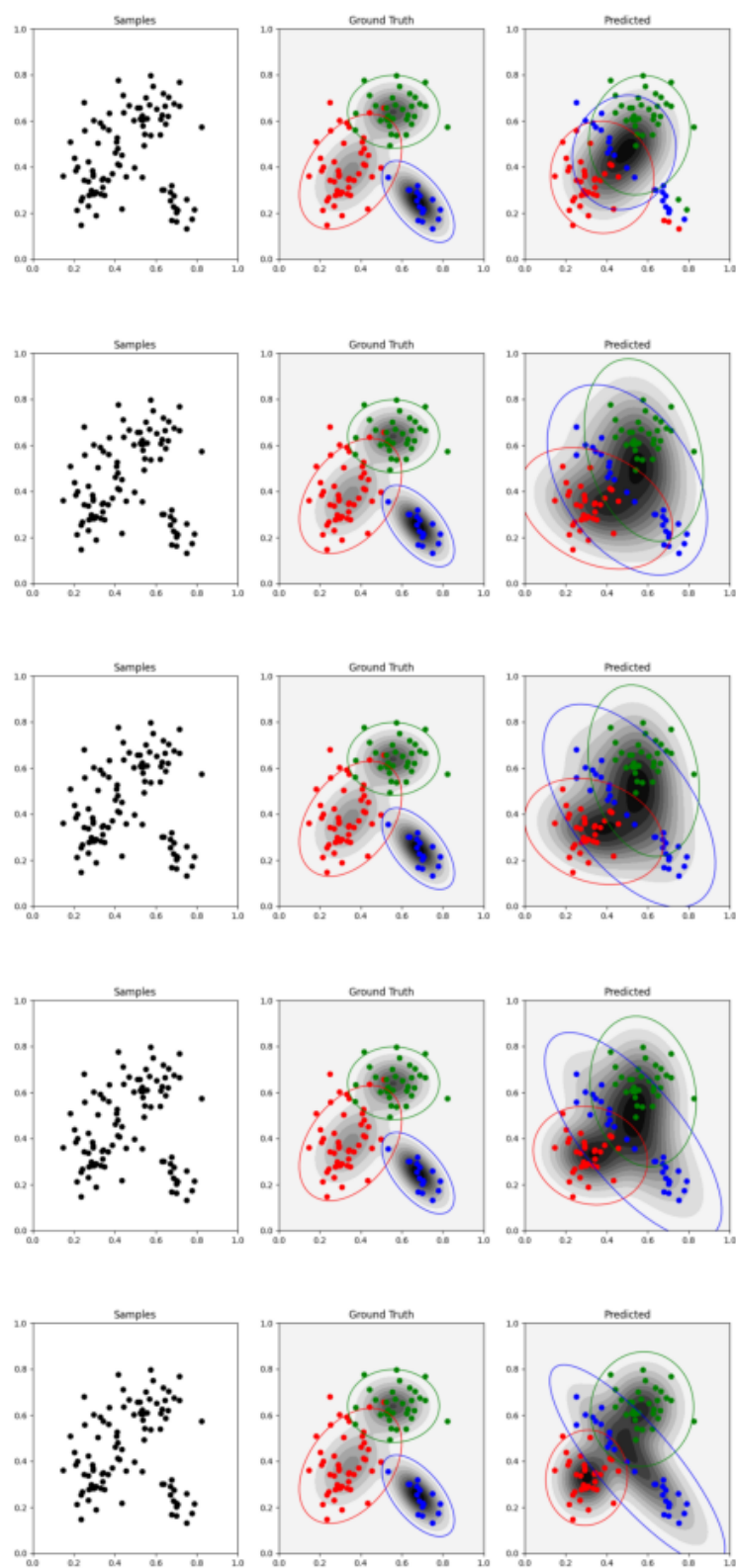
### Question 2

- Particle Filter



### Question 3

- Non Converging GMM EM



- Converging GMM\_EM where initial mean and sigma were set closer to the real value for test

