**CS5542 Big Data Apps and Analytics**

**In Class Programming –9**

**22nd October 2020**

**Submit ICP Feedback in Class. :** [**Lnik to Feed back Form**](https://docs.google.com/forms/d/e/1FAIpQLSesllFh5_STnj7RbHyQainRG_2EIKw1csp8ObP5FWjpVnGVOg/viewform)

**Variational Autoencoders:**

**Create a linear regression model in python using any dataset of your choice. For this model you can also create your own data. Find the best fit line in the data and calculate SSE (sum of square error) or MSE (Mean square error) , Y intercept, and Slope for the relationship in data. Explain your findings and understanding of these terms in detail in the report.**

ICP Requirements:

1. Successfully executing the code with linear regression model and calculating following:
   1. SSE or MSE
   2. Y intercept
   3. Slope

(75 points)

1. Detail explanation of each in report (5 points)
2. overall code quality (10 points)
3. Pdf Report quality, video explanation (10 points)

Submission Guidelines:

Same as previous ICPs.