

3:10-4:10 PM, 31/01/2019 (Thursday)

Venue - LH-2

Linear regression using Gradient Descent (by Abhishek Varghese)

- Abstract: Linear Regression is one of the most basic and important topics in Machine Learning. This discussion will give you a basic understanding of linear regression, using the concepts which you have learnt in your basic calculus course (MA 105).
- Prerequisites
 - o Gradient Gradient and Gradients and Partial Derivatives

Convergence analysis of gradient descent (by Shivam Pandey)

- Prerequisites
 - Taylor polynomial and series <u>Taylor series | Essence of calculus, chapter</u>
 11
 - o Convex function Convex function Wikipedia
 - o Lipschitz continuity Lipschitz continuity Wikipedia
 - o <u>Lagrange Remainder</u>