Linear Regression

Course

- Complete the following topics of this lecture for the first lecture series:*
  https://www.coursera.org/learn/machine-learning
  - Week 1 : Introduction
  - Week 1 : Linear Regression with One Variable
  - Week 1 : Linear Algebra Review (Optional)
  - Week 2 : Linear Regression with Multiple Variables

If you have already completed the course, go through the blogs and advanced topics for better understanding.

Suggested Blogs

- Introduction to ML
  - https://medium.com/@gowthamy/machine-learning-supervised-learning-vs-unsupervised-learning-f1658e12a780
  - https://medium.com/@gowthamy/machine-learning-supervised-learning-vs-unsupervised-learning-f1658e12a780

- Linear Regression - General
  - https://medium.com/coinmonks/linear-regression-bf5141ce9ac8
  - http://www.holehouse.org/mlclass/04_Linear_Regression_with_multiple_variables.html
  - https://towardsdatascience.com/linear-regression-detailed-view-ea73175f6e86
  - https://medium.com/@erika.dauria/looking-at-r-squared-721252709098
- Gradient descent
  - https://medium.freecodecamp.org/understanding-gradient-descent-the-most-popular-ml-algorithm-a66c0d97307f
  - https://www.knowledgehut.com/blog/data-science/gradient-descent-in-machine-learning
  - https://towardsdatascience.com/machine-learning-bit-by-bit-multivariate-gradient-descent-e198fdd0df85
- Model representation and Cost Function
  - https://medium.com/@lachlanmiller_52885/machine-learning-week-1-cost-function-gradient-descent-and-univariate-linear-regression-8f5fe69815fd
  - https://medium.com/@lachlanmiller_52885/understanding-and-calculating-the-cost-function-for-linear-regression-39b8a3519fcb

Advanced Topics

- https://youtu.be/UzxYlbK2c7E
- https://youtu.be/5u4G23_OohI

- https://www.google.com/url?sa=t&source=web&rct=j&url=https://web.cs.wpi.edu/~kmlee/ds3001/ng-linear-regression-notes.pdf&ved=2ahUKEwiloqvdlL7wAhU1xDgGHSJsCOwQFjAlegQICBAC&usg=AOvVaw0QSWcyo69x_BhKB02DK2HP&cshid=1620617032103