

**BITS F464 - Machine Learning**  
**I Semester 2018-2019**  
**Assignment #2**  
**Weightage: 15%**  
**Due Date: 06<sup>th</sup> October, 2018 (Saturday)**

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19<sup>th</sup> September, 2018

1. Linear Models for Regression: Build a Bayesian Linear Regression Model and compare it with Linear Basis Function Model. DO a quantitative as well as qualitative comparison.

**Reference:** Chapter 3 of Bishop Book on Pattern Recognition and Machine Learning  
You need to submit a hand written report. Figures, tables, and graphs can be taken printed

2. Academic Counselling Board (ACB): Every semester, many students land up in ACB because of poor academic performance. Can ML help students in avoiding ACB by predicting if a student is likely to get into ACB or not? This we need to do every semester after the mid-semester grades are announced. If we are able to predict accurately, then such student can be counselled and helped so that they are able to avoid ACB.

You are required to build a classification model. Also, you need to identify and collect relevant data. You also must compare different classification models covered in the class so far.

Group Information:

Max. 03 students are allowed per group. NO RELAXATION!

Navneet Goyal  
goel@  
6121-K, NAB.