**DATA SCIENCE PROJECT 2 (MAST90107)   
Semester 2 2021**

**GROUP 17**

## Meeting No. 1

**Date & Time:** Tuesday 27th July 2021 , 12pm - 1pm

**Agenda:** Discussion about next stages

**Attendees:** Kartika Waluyo, Vrinda Rajanahally, Roberto Bonelli

**Discussion:**

1. Autokeras and autoencoders

* Learn about auto encoders - what they are, what they do, how do they influence modelling, hyperparameters

2. Neural Networks and XGB

* Each of us to take up one modelling method and see how they compare

3. Q&As covered on the modelling methods and the final desired result

* How will the model behave when some of the features are missing? Trialing this with 2 datasets where one of them has all the gene entries, and the other has a few missing.
* What is a case controlled study?
* How can we incorporate the model into the predictive algorithm?
* Shiny apps in R

4. Presentation to be shifted to the end of the semester, once the project has been concluded.

5. To bring to the next meeting:

* Plan of action - drafted by Kartika and Vrinda
* Our understanding of autoencoders and autoKeras in R and how we aim to use it for the project

**Resources:**

Models for correlated input and correlated output: Auto encoders & Recurrent Neural Net

Find Hyper-parameters

AutoML -> automates the architecture of models -> Autokeras

<https://blogs.rstudio.com/ai/posts/2019-04-16-autokeras/>