## Open Book, Take Home AI Assignment 2.

## Master of Science in Computer Science

## Deadline for Submission is Tuesday 3<sup>rd</sup> November 2022 (STRICTLY 1:00pm)

The Google Form Will Close Automatically.

As an individual or a Team of two, work on your identified real-life Problem by performing the Following Tasks.

- 1. Use the PPT template provided to create a PowerPoint presentation with the following slides.
- Slide 1: Describe your identified real-life problem to be addressed using Machine Learning (ML).
- Slide 2: Obtain an open dataset and briefly describe how it will be used in addressing the identified real-life problem.
- Slide 3: Explain at least four factors you considered before selecting that dataset for your ML project.
- Slide 4: Describe at least six important features in your dataset that your ML model will likely use while solving the real-life problem you are addressing.
- Slide 5-6: Describe what you understand by Bayesian Theorem and how it can be applied in your project.
- Slide 7-8: Describe what you understand by Naïve Bayes and how it can be applied in your project.
- Slide 9-10: Describe what you understand by Bayesian Networks and how it can be applied in your project.
- Slide 11: Explain the difference between Bayesian Theorem and Naïve Bayes.
- Slide 12: Explain the difference between Naïve Bayes and Bayesian Networks
- Slide 13: Please add any five most relevant references to your work including the link to your selected dataset.

NOTE: Your ppt Presentation should have a MAXIMUM OF 15 SLIDES.

NOTE: Your video Presentation should be a maximum of 13 minutes.

- 2. Please create a video presentation and upload it on your YouTube channel.
- 3. Then upload your ppt presentation and share <a href="the-link to your uploaded YouTube video">the link to your Kaggle Profile</a> account and the <a href="link to your selected dataset">link to your selected dataset</a> in the google form below: <a href="https://docs.google.com/forms/d/e/1FAIpQLScuuTaAr28-QEqzUnr7FOfHNghx-MwvDoxuQs5IM0wtXxhtLg/viewform">https://docs.google.com/forms/d/e/1FAIpQLScuuTaAr28-QEqzUnr7FOfHNghx-MwvDoxuQs5IM0wtXxhtLg/viewform</a>

## Download the PPT Presentation Template from:

 $\frac{https://docs.google.com/presentation/d/1ZgVHC0hUNuKwVjO6FJCG9yWRjDyCEcU7/edit?usp=sharing\&ouid=104624158981195822054\&rtpof=true\&sd=true$ 

NOTE: That is Just a Presentation Template, therefore adjust it to fit the required presentation. You can create your Kaggle Account from:

https://www.kaggle.com/account/login?phase=startRegisterTab&returnUrl=%2F

Obtain an appropriate Open Dataset from any of the following sites: (NOTE: This list is not exhaustive)

https://data.mendeley.com/

https://archive.ics.uci.edu/ml/datasets.php?task=%20&area=&type=%20&view=list

https://ieee-dataport.org/

https://www.clickworker.com/ai-datasets-for-machine-learning/

https://deepai.org/datasets

https://air.ug/datasets/

https://hash.theacademy.co.ug/hash-datasets/

https://allenai.org/data

https://github.com/awesomedata/awesome-public-datasets

https://datarade.ai/data-categories/ai-ml-training-data

https://appen.com/solutions/training-data/

https://eo4society.esa.int/projects/aireo/

https://sigma.ai/resources-datasets/

https://ai.facebook.com/datasets/

https://www.sama.com/blog/11-open-source-datasets-for-machine-learning/

https://pub.towardsai.net/best-datasets-for-machine-learning-data-science-computer-vision-nlp-ai-

c9541058cf4f?sk=f1b8356b013171d7796619e57d7555c9&source=friends\_link&gi=fcf6f2f62b4d

https://www.kaggle.com/account/login?phase=startRegisterTab&returnUrl=%2F