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# Department of Computing

**CS471: Machine Learning**

**Class: BESE-7AB**

**Lab 11: Open Ended Lab**

**CL03: Use modern tools to solve practical problems.**

**Date: 25-04-2019**

**Time: 10:00 am– 1:00 pm & 2:00 pm-5:00 pm**

**Instructor: Dr. Pakeeza Akram**

**Lab 11: Open Ended Lab**

**Introduction**

In this lab you will choose a dataset and apply 3 machine-learning algorithms and report on the accuracy of the algorithms.

**Tools/Software Requirement**

Python, scikit-learn

**Description**

Go through the following website <http://archive.ics.uci.edu/ml/> and select a dataset (either classification or regression). Apply **three** algorithms on the dataset using Python Scikit-learn library (http://scikit-learn.org/stable/).

**Tasks & Deliverables**

You report should contain the following headings.

1. **Introduction**

What dataset you selected and why.

1. **Algorithms**

What algorithms you applied using scikit-learn. Details of the three algorithms. Understand what the algorithm is doing as you will be asked question about it.

1. **Code**

Attach your code file(ipynb, py).

1. **Results**

Partition the data into training, validation set and report accuracy of the three methods. How did you chose the parameters of the algorithms and what affect it have on the result.

1. **Summary**

Summarize. What did you learn?