**CSCI 2150L**

**Session 3 Topics:**

1. We generated a matrix **t** using **linspace(start, end)** command and one of its variation **linspace(start, end, n\_points)** where **start** and **end** signifies the initial and final value the array should hold. The other argument **n\_points** is the number of points specified by the user.
2. We created two matrices **a = sin(t)** and **b = cos(t)**.
3. Subsequently another matrix **c** was created where **c = a .\* b** (Any arithmetic operator preceded by a **dot** (.) signifies point wise operation. In this case using only \* would suggest matrix multiplication whereas **.\*** suggests point wise multiplication between arrays. This rule is applicable for the other arithmetic operators as well).
4. All the three matrices were plotted in the same figure using **plot(t,a,t,b,t,c)** command.
5. We added title, label, legend to the figure to make it more meaningful.
6. Subsequently we discussed to use **figure** command to generate new figure frame.
7. Switching between figures were possible by **figure(index)** command where **index** is the order in which the figure was generated. Once switched to a figure, all the subsequent commands for plot (**xlabel**, **ylabel**, **title**, **legend** etc) will be applicable for that figure only.
8. To find the dimension of the array we used **size(ar)** command where **ar** is the name of the array. We will use this command more often in the following classes.
9. To plot a circle with radius r by writing a function circle(r) in a script circle.m