

**Morgan State University**  
**Department of Electrical & Computer Engineering**

**EEGR 409: C Programming Applications**

**Project 2.1**

**Objective:**

Modify project 1:

- Implement a `GetSignalParameters(double params[])` method (if you have not already done so) that is responsible for getting **validated signal** parameters
  - Make sure to catch any exceptions that is generated from the user providing unexpected input that can crash the code
  - In case of an exception, ask the user to reenter valid input
- Create an *abstract* **Signal** superclass
  - Create **SineSignal**, **SquareSignal**, **SawtoothSignal** classes that are sub classes of **Signal**
  - **Signal** class should hold all points being plotted
  - **Signal** class should contain all the graphing functions necessary to plot the data points
  - All subclasses of **Signal** are responsible for generating the appropriate points for the signal being created
  - In the **main** method, you should be able to do something like:

```
SineSignal ss = new SineSignal(params);  
ss.plot();
```