

University of Rajshahi  
Department of Computer Science and Engineering  
Artificial Intelligence Lab [CSE-4132]

1. Build a fully connected neural network (FCNN) and a convolutional neural network (CNN) for classifying 10 classes of images.
2. Build a fully connected neural network (FCNN) and a convolutional neural network (CNN) for classifying 10 classes of images.
3. Build a CNN having a pre-trained MobileNet as backbone to classify 10 classes.
4. Train and test your CNN having a pre-trained MobileNet as backbone to classify images of the CIFAR-10 dataset. Discuss your results by comparing performance between transfer learning + fine tuning and only transfer learning.
5. Root finding of a polynomial Equation using Neural Network.
6. Implementation of Heuristic Search Algorithm.
7. Implementation of A\* search Algorithm.
8. Implementation of Best First Search Algorithm