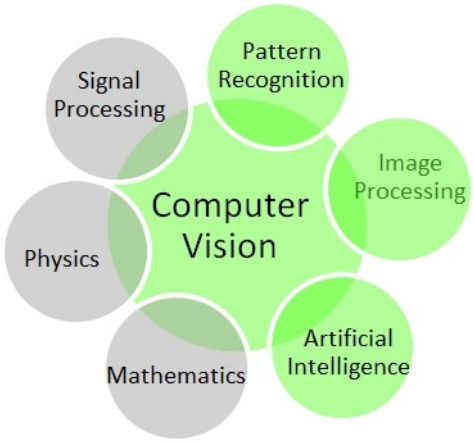
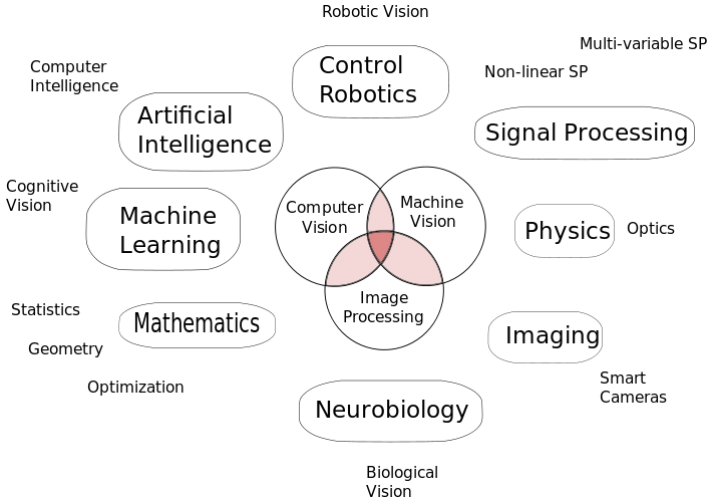
Manarat International University (MIU)

Department of Computer Science and Engineering
Computer Vision & Robotics (CSE-437)
Course outline (Summer-2020)

Course Trees





Course Objective

a) To understand the fundamentals of image classification, and object recognition
b) To familiar with the major deep learning based-algorithms involved in computer vision

Syllabus

S.L	Topic	Content	Resources
1	Introduction to Computer Vision	slides	Repository
2	Image Classification	slides notes	CS231n
3	Loss Functions and Optimization	slides notes-1 notes-2	CSE599G1
4	Convolutional Neural Networks	slides notes	
5	Training Neural Networks	slides notes-1 notes-2	Coursera
6	CNN Architectures	slides	Book
7	Object Detection and Segmentation	slides	
8	Recurrent Neural Networks & LSTM	slides notes	

Marks Distribution

S.L.	Exam	Mark	Syllabus
1	Midterm	30	1 – 4
2	Final	50	5 - 8
3	Teacher's Review	20	Quiz + Class Test + Class Performance
Total		**100**	

Due to the current COVID-19 situation different arrangements will have to make in assessments to facilitate remote learning and teaching.