

# AI772: COMPUTER VISION

## (Assignment - II)

Duration: 1 Week

Total Marks: 20

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Write a 5-page technical report on any **ONE** of the following. Use the  $\text{\LaTeX} 2_{\epsilon}$  style file given on the course home page. Your report should contain the following sections:

**Introduction:** should contain the precise problem definition; why it is important in Computer Vision; at what level is it? how old is the problem, etc.

**Early methods:** should describe the methods that provide simple solutions and may fail to handle any of the complex cases and noise

**State-of-the-art:** should describe the current methods and what are the cases that they can handle successfully and for which cases they fail

**Favourite Method:** pick one of the methods and describe it in detail. Make sure you list who proposed it and who improved it if any

**Discussion and analysis:** a short section that says why you like the method in the previous section; its strengths and weaknesses; extra credit if you can say how you may improve it — no details are necessary but you should present your idea convincingly

**Conclusion:** state briefly (again) why you consider the problem important and how solving it can help computer vision

### LIST OF TOPICS

1. Simulated annealing
2. Active contour models
3. Relaxation labelling
4. Face recognition
5. Convolutional Neural Networks
6. Aspect graphs
7. Geometric hashing
8. Spin images