Neural network based attention models

Total points 5/5

The respondent's email (**m22cs060@iitj.ac.in**) was recorded on submission of this form.

✓ Which of the following are the outputs from the decoder in an Attention-Based Neural Network (AB-RNN)? *1/1

- [x] Next location to be attended to ✓
- [ ] The location of the salient object in the scene
- [x] An action, like navigating a car ✓
- [ ] The parameters for the encoder network

✓ "Hard attention" means * 1/1

- ○ Cases where saliency is hard to decide
- ◉ Allocation of binary saliency value to any image location ✓
- ○ Algorithms for attention computations, which are NP-hard
- ○ Allocation of highest saliency values to hard (rigid) objects in a scene

✓ In NN-based attention models, multi-scale analysis is done to * 1/1

- ○ To improve computational efficiency
- ◉ To capture context as well as finer details (contrasts) ✓
- ○ Accomodate objects of different sizes

✓ Why is a CNN pre-trained for object recognition used for implementing NN-based attention models? *1/1

- [x] Saliency is determined by objects in the scene ✓
- [x] The pre-trained networks are trained with millions of training samples ✓
- [ ] The pre-trained networks have been developed by eminent scientists
- [x] Large training databases for saliency models do not exist ✓

✓ In the representation of "Glimpse" * 1/1

- ( ) There is no relation between the representation of the central and the outermost areas
- ( ) Less number of bytes are used to represent central area than the outermost area
- (•) Equal number of bytes are used to represent central area than the outermost area ✓
- ( ) More number of bytes are used to represent central area than the outermost area