

Coarse Temporal Attention Network (CTA-Net) for Driver’s Activity Recognition

Supplementary Figures

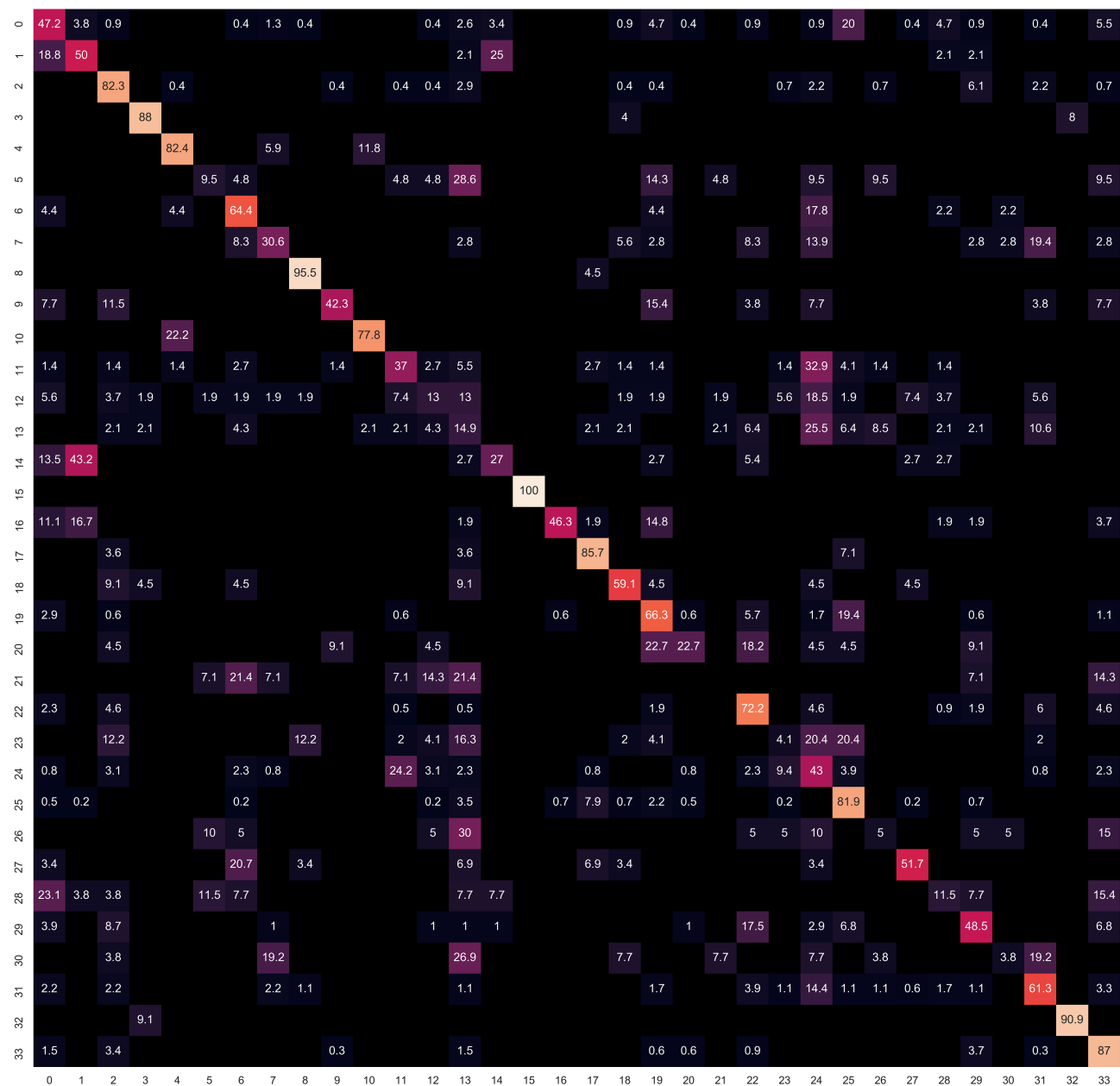
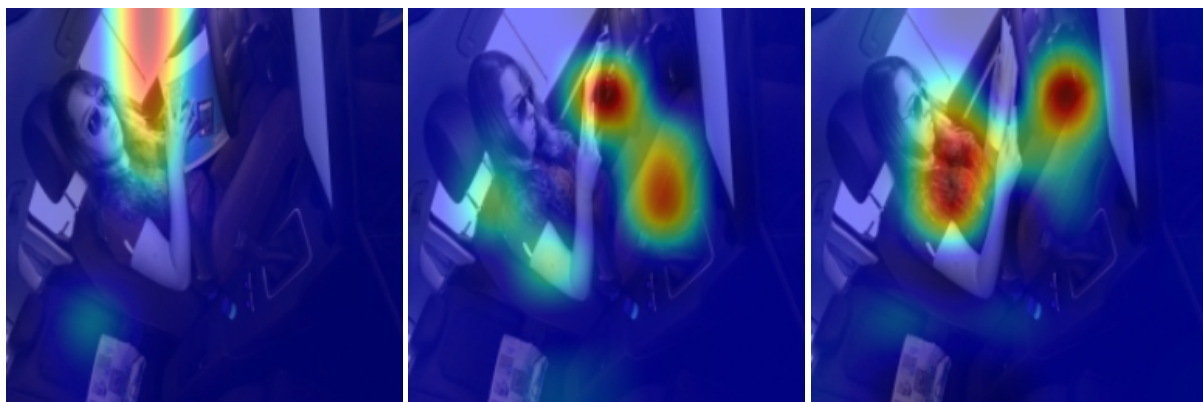
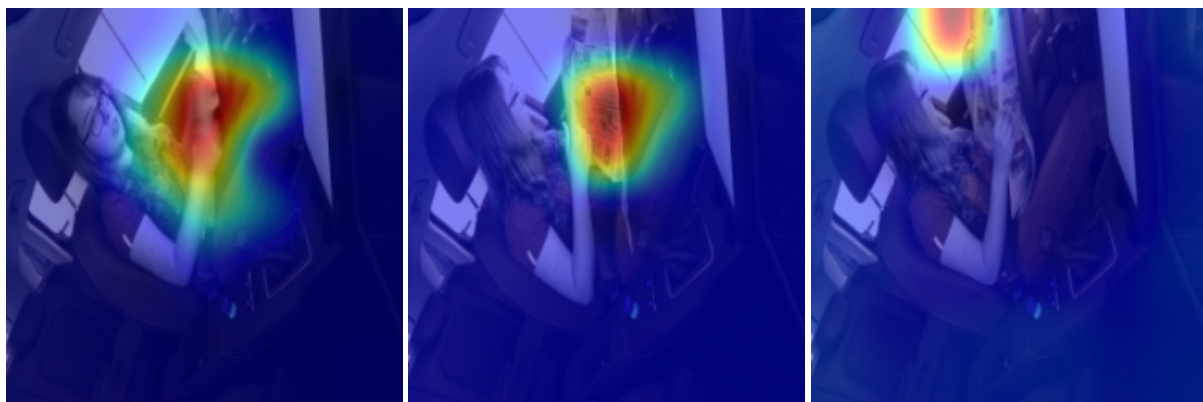


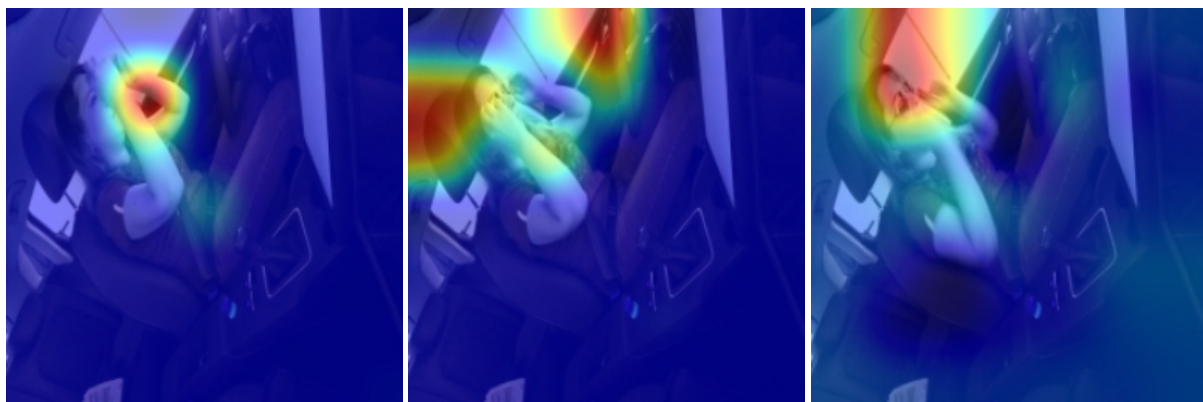
Figure 5: Our CTA-Net’s confusion matrix showing 34 fine-grained activities in the Drive&Act test set.



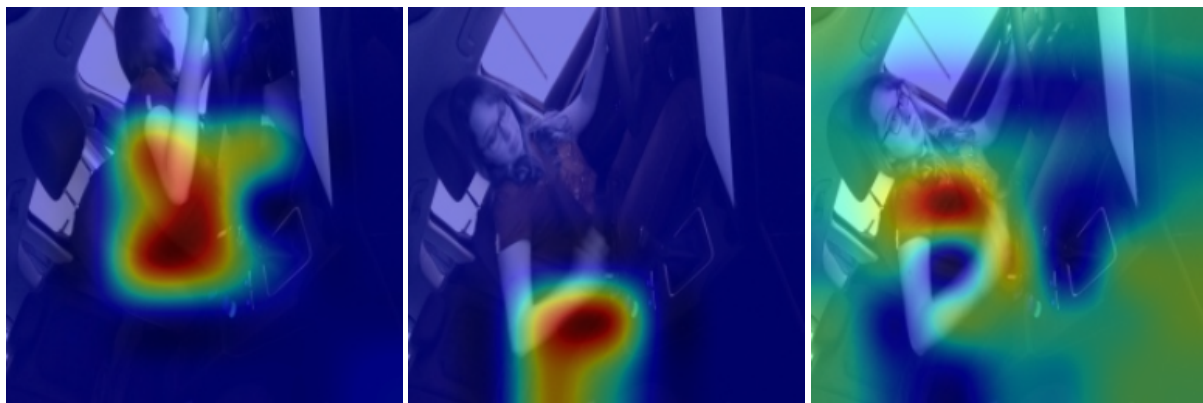
(a) Reading Magazine (Before, During, After)



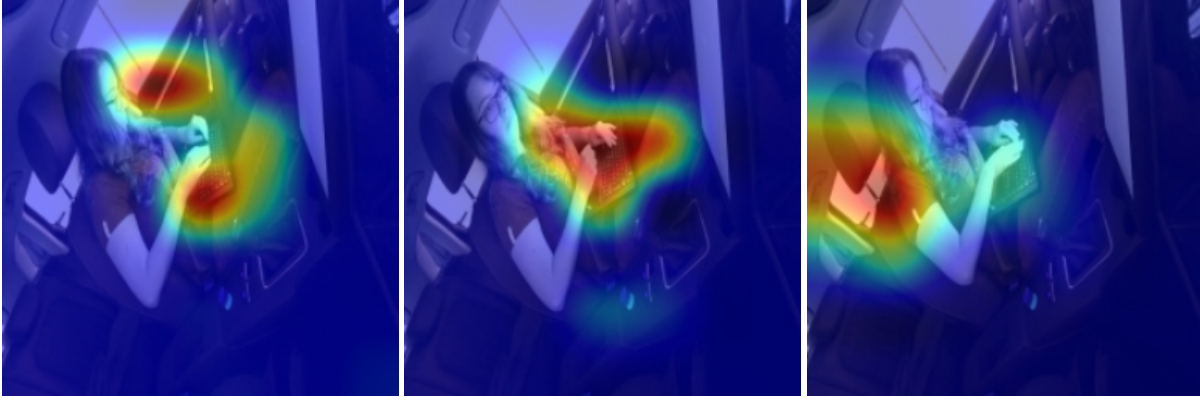
(b) Reading Newspaper (Before, During, After)



(c) Put on Sunglasses (Before, During, After)

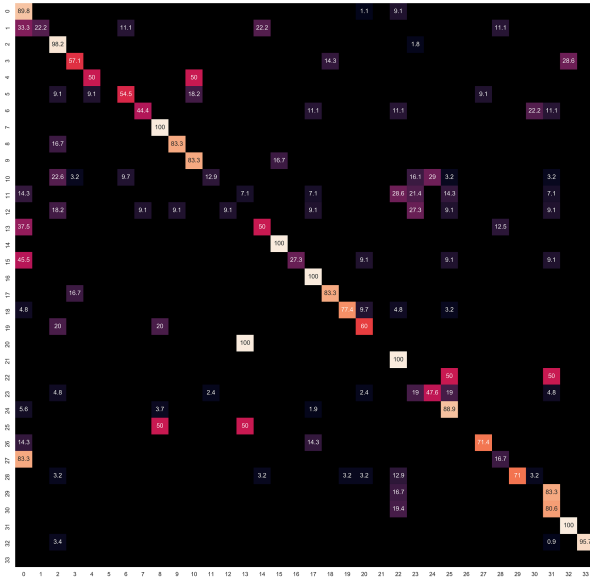


(d) Put on Seat-belt (Before, During, After)

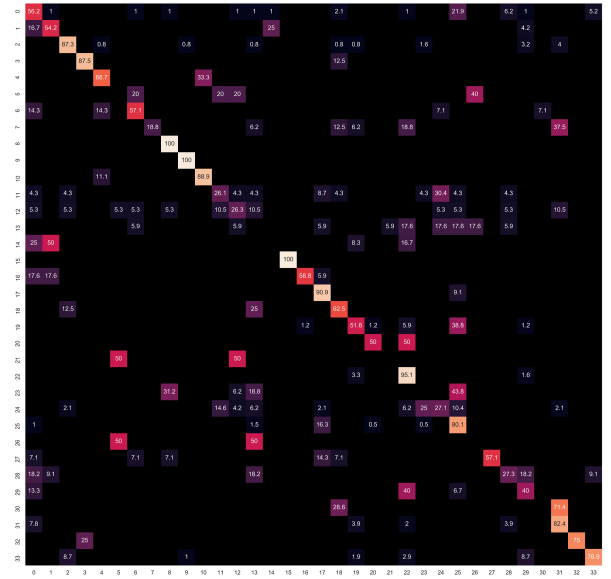


(e) Working (Before, During, After)

Figure 6: More examples demonstrating visual explanation of decision from our CTA-Net using class activation map representing our coarse temporal attention of ‘before’ (left), ‘during’ (middle) and ‘after’ (right) segment of 5 different actions

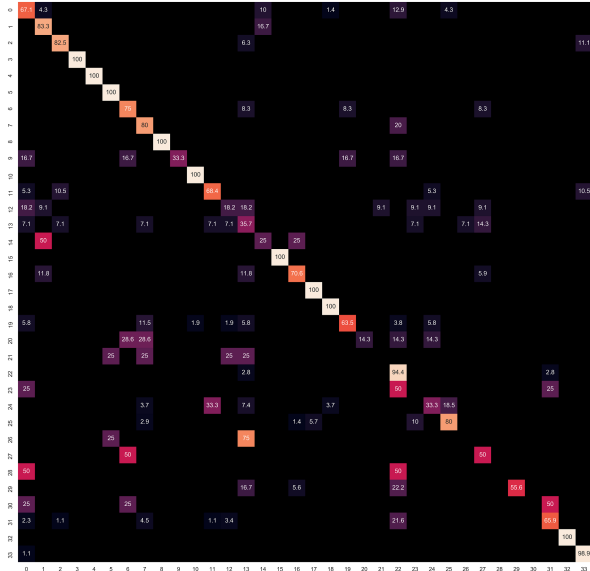


(a) Validation set

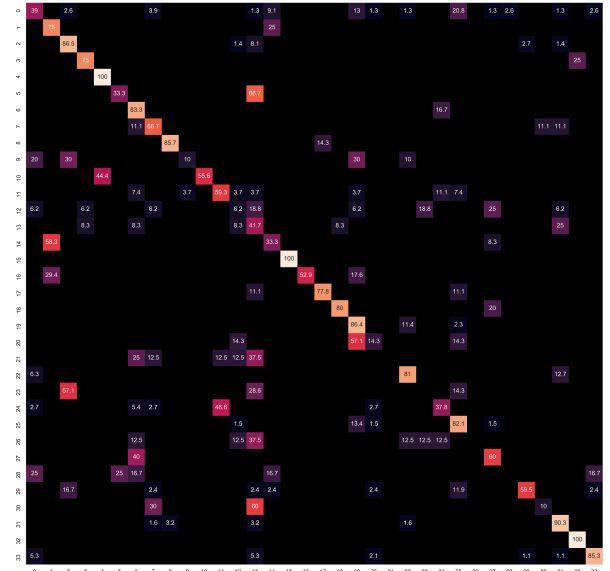


(b) Test set

Figure 7: CTA-Net’s confusion matrix of the 34 fine-grained activities using **split 0** in Drive&Act dataset

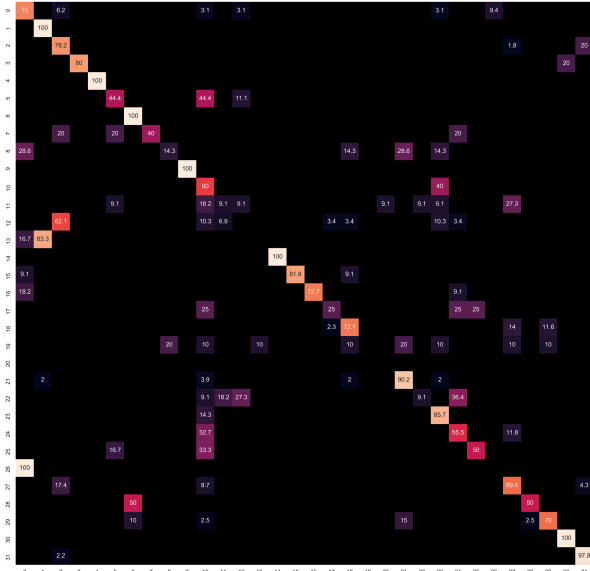


(a) Validation set

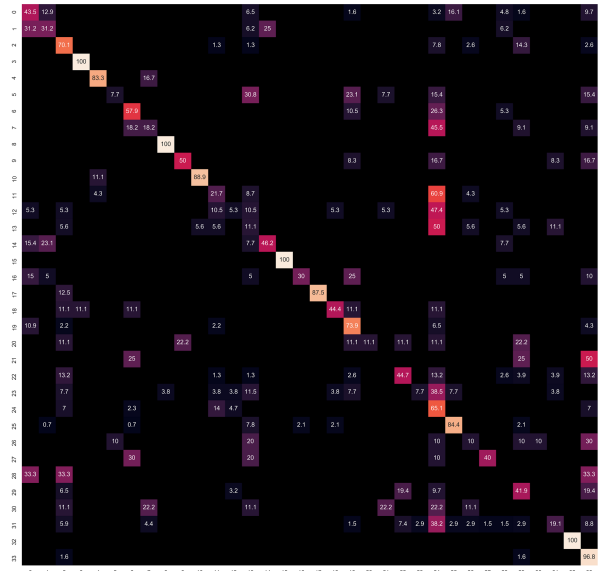


(b) Test set

Figure 8: CTA-Net’s confusion matrix of the 34 fine-grained activities using **split 1** in Drive&Act dataset

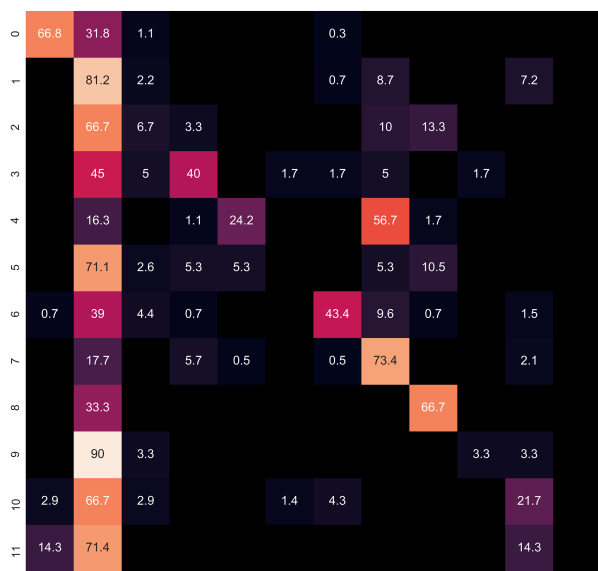


(a) Validation set

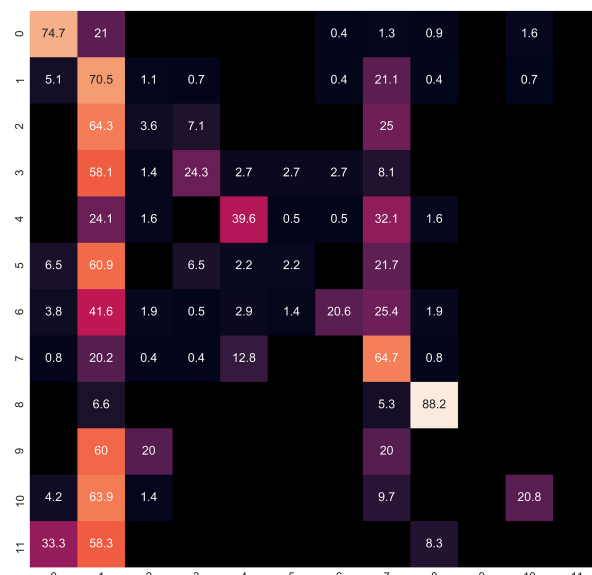


(b) Test set

Figure 9: CTA-Net’s confusion matrix of the 34 fine-grained activities using **split 2** in Drive&Act dataset

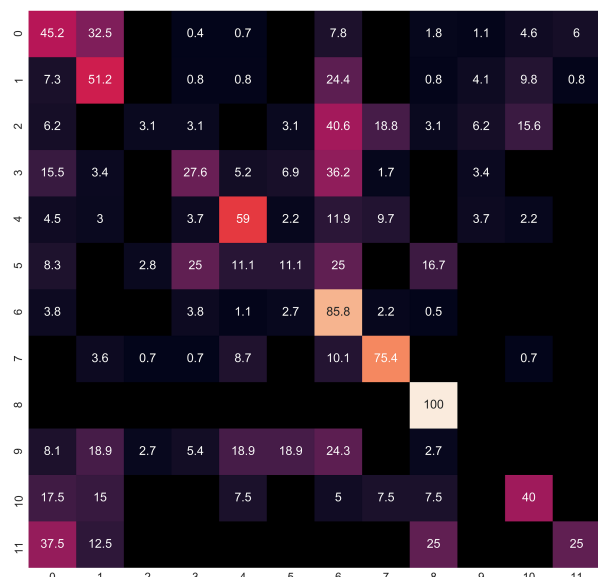


(a) Validation set

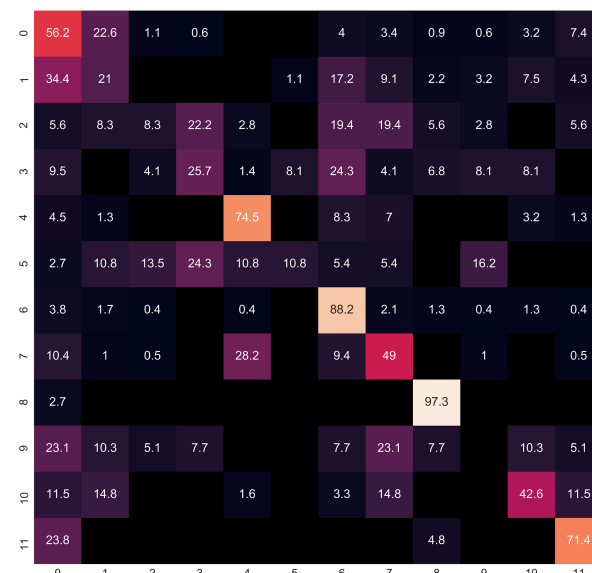


(b) Test set

Figure 10: CTA-Net’s confusion matrix of the 12 coarse/scenario tasks using **split 0** in Drive&Act dataset

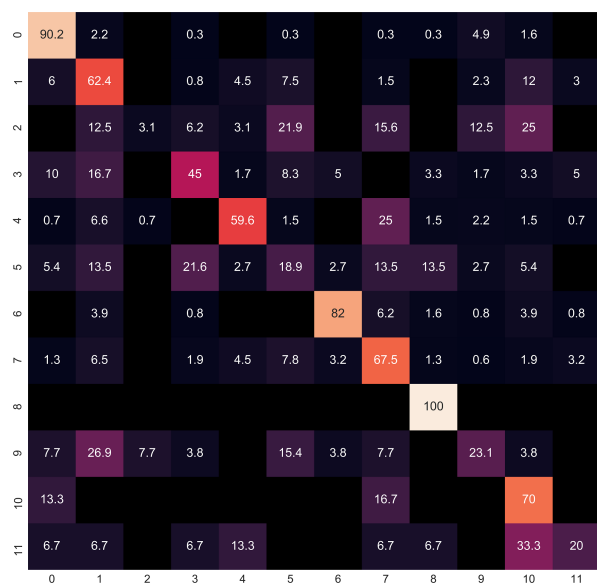


(a) Validation set

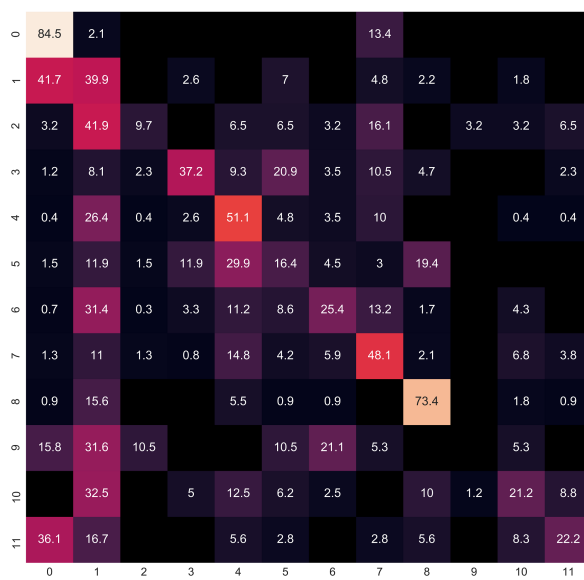


(b) Test set

Figure 11: CTA-Net’s confusion matrix of the 12 coarse/scenario tasks using **split 1** in Drive&Act dataset



(a) Validation set



(b) Test set

Figure 12: CTA-Net’s confusion matrix of the 12 coarse/scenario tasks using **split 2** in Drive&Act dataset